

SOUTH CAROLINA ELECTRIC & GAS COMPANY  
 VIRGIL C. SUMMER NUCLEAR STATION  
 NUCLEAR OPERATIONS

# INFORMATION ONLY

FIRE EMERGENCY PROCEDURE

FEP-1.0

FIRE EMERGENCY PROCEDURE SELECTION

REVISION 10

  
 \_\_\_\_\_  
 DISCIPLINE SUPERVISOR

SAFETY RELATED  
3/25/98  
 DATE

  
 \_\_\_\_\_  
 APPROVAL AUTHORITY

3/25/98  
 DATE

RECORD OF CHANGES

CHANGE LETTER	TYPE CHANGE	APPROVAL DATE	CANCELLATION DATE	CHANGE LETTER	TYPE CHANGE	APPROVAL DATE	CANCELLATION DATE
A	P	04-23-98					

**CONTINUOUS USE**

Continuous Use of Procedure Required.  
 Read Each Step Prior to Performing.

NUCLEAR OPERATIONS

COPY NO. 1

SAP-139  
ATTACHMENT IV  
PAGE 1 OF 3  
REVISION 16  
CHANGE F

PROCEDURE DEVELOPMENT FORM - A

DATE: 09-10-96 PROC. # FEP-1.0 REV. # 910 CHG. DA COMM. # \_\_\_\_\_  
 TITLE: FIRE EMERGENCY PROCEDURE SELECTION  
 NEW PROC  CHANGE  PERMANENT  SAFETY RELATED   
 REVISION \_\_\_\_\_ RESTRICTED \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_ QUALITY RELATED \_\_\_\_\_  
 NON-SAFETY RELATED \_\_\_\_\_

II. DESCRIPTION: On Attachment I Change Fire Zone CB-16 to CB-8.4. Change Fire Zone CB-19 to CB-8.5.

REASON FOR CHANGE:

MRF 34851

RPerrill  
Originator

III. WILL THIS REVISION/CHANGE/NEW PROCEDURE:

	* YES	NO	N/A
1. Result in significant increased personnel radiation exposure? (ALARA review)	_____	<input checked="" type="checkbox"/>	_____
2. Result in a release of effluents to the Environment?	_____	<input checked="" type="checkbox"/>	_____
3. Degrade the effectiveness of the Radiation Emergency Plan?	_____	_____	<input checked="" type="checkbox"/>
4. Degrade the safeguards effectiveness of the Physical Security, Safeguards Contingency or Training and Qualification Plans?	_____	_____	<input checked="" type="checkbox"/>

\* If any question 1 through 4 is answered "YES", refer to appropriate section of procedure for direction.

REQUIRED REVIEW AND COMMENT:

- OPS  NL&OE  CHS  GMNPO
- MNITS  P&S  HPS  GMES
- QA  NPS  MNT  GMNSS
- QC  TS  DE  QR (OPS)  TOM Reckesen

[Signature] 9/16/96  
Discipline Supervisor Date

IV. 10CFR50.59 SCREENING REVIEW/SAFETY EVALUATION  
 REQUIRED  EXEMPT  PSRC SUPPORTING DOCUMENT: MRF 34851  
[Signature]  
 Discipline Supervisor concurrence

V. TEMPORARY APPROVAL:  
 QUALIFIED REVIEWER \_\_\_\_\_ DATE \_\_\_\_\_ QA REVIEW \_\_\_\_\_ DATE \_\_\_\_\_  
 TELECON BY \_\_\_\_\_ TELECON BY \_\_\_\_\_  
 SHIFT SUPERVISOR \_\_\_\_\_ DATE \_\_\_\_\_ FINAL APPROVAL REQUIRED BY: DATE \_\_\_\_\_

VI. DISCIPLINE SUPERVISOR FINAL REVIEW:  
 TRAINING REQUIRED? YES \_\_\_\_\_ NO   
 IF YES, PRIOR TO PROCEDURE IMPLEMENTATION? YES \_\_\_\_\_ NO   
 P/CAP AFFECTED? YES \_\_\_\_\_ NO   
 COMMENTS RESOLVED: [Signature] 4/23/98  
 Discipline Supervisor Date

VII. P/CAP ACCEPTABLE?  
 C. YES  NO  NL&OE \_\_\_\_\_ Date \_\_\_\_\_  
 N. YES  NO  RESP. MGR. \_\_\_\_\_ Date \_\_\_\_\_

VIII. FINAL QA REVIEW (As Applicable)  
 QA Concurrence [Signature] 4/23/98 Date \_\_\_\_\_

IX. APPROVAL AUTHORITY:  
[Signature] 4/23/98  
 Approval/Concurrence Date

X. PSRC REVIEW:  
 A. REVIEWED BY: \_\_\_\_\_ Date \_\_\_\_\_  
 PSRC Chairman  
 COMMENTS: YES \_\_\_\_\_ NO \_\_\_\_\_  
 B. PSRC COMMENTS RESOLVED: \_\_\_\_\_ Date \_\_\_\_\_  
 Responsible Manager  
 \_\_\_\_\_ Date \_\_\_\_\_  
 PSRC Chairman

TABLE OF CONTENTS

	<u>SECTION</u>	<u>PAGE</u>
1.0	<u>PURPOSE</u>	1
2.0	<u>INITIAL CONDITIONS</u>	1
3.0	<u>OPERATOR ACTIONS</u>	2
4.0	<u>REVISION SUMMARY</u>	3

ATTACHMENTS

- Attachment I - Fire Procedure / Attachment Cross Reference
- Attachment II - Fire Procedure Step Substitutions

1.0 PURPOSE

This procedure provides direction in determining which fire zone is affected based on information coming in from the plant. It also directs operations personnel to the correct procedure or attachment once the exact fire zone is determined.

2.0 INITIAL CONDITIONS

- 2.1 A fire within the protected area has been reported to the Control Room or has alarmed on the Simplex Fire System.
- 2.2 Fire brigade is on the scene and is providing information as to the exact location and the severity of the fire.
- 2.3 The fire is of such a nature (due to magnitude, location, or equipment involved) that there is concern about maintaining the ability to safely control the plant.

CAUTION 3.0

- a. Many assumptions were made when the Fire Emergency Procedures (FEP's) were written. The major assumptions were.
  - 1) No other accident or failure occurs with the fire except that caused by the fire.
  - 2) All equipment was operable or replaced by swing components. All equipment starts and functions or can be locally operated.
  - 3) All actions could be performed as written. However, in some cases, access to certain equipment may be hampered by fire. It may be necessary to delete steps in order to avoid personnel injury. These cases should be evaluated by the Shift Supervisor.
- b. If the assumed plant conditions do not exist, the situation must be evaluated. Additional Operator actions may be required to maintain the plant in a safe condition. Some equipment may be operated from a location other than that listed.

3.0 OPERATOR ACTIONS

- 3.1 If the exact fire zone is not known, determine from personnel in the plant the exact location of the fire.
  - a. Building and elevation.
  - b. Area (East, West, North or South).
  - c. Room number.
  - d. Equipment affected or in the area.

NOTE 3.2

E-023-000 series drawings, located in the control room, should be used to determine the exact fire zone when fire zone number is not known.

- 3.2 Determine the exact fire zone in which the fire is located.
- 3.3 Use Attachment I to determine the correct procedure and Attachment II Part Number.

NOTE 3.4

Part Numbers which are bold and underlined contain Immediate Actions and must be implemented promptly.

- 3.4 Implement the procedure and Attachment II Part Number determined above.

4.0 REVISION SUMMARY

- 4.1 Incorporated changes A through F.  
4.2 Updated format and font.  
4.3 Corrected typographical errors.  
4.4 Converted to Word.

FIRE PROCEDURE/ATTACHMENT CROSS REFERENCE

FIRE ZONE	DRAWING E-023-	FEP	MODIFIED BY ATTACHMENT II <u>PART NUMBER</u>				
			CRS	A RO	SE	AB (UPPER)	IB
CB-1.1	018,020	2.0	1	<u>1</u>	1	1	<u>1</u>
CB-1.2	019,020	2.0	1	<u>1</u>	1	1	<u>1</u>
CB-2	018	2.0	2	<u>43 44</u>	50		
CB-3.1	018, 020	2.0					
CB-3.2	020	2.0					
CB-4	019, 020	4.0					
CB-5	018	3.0	3,4				
CB-6	018, 019, 020	4.0					
CB-7	018,020	2.0	5				
CB-8.1	018,020	2.0					
CB-8.2	018,019,020	2.0					
CB-8.3	018,019	2.0					
CB-8.4	019,020	2.0					
CB-8.5	019	2.0					
CB-9	018,020	2.0					
CB-10	018,019,020	3.0	6,7,8	<u>42 43 44</u> 47	50,51		
CB-12	018,020	2.0	5,6	<u>40 43 44</u>	50	54	
CB-14	018	2.0					
CB-15	019,020	4.0					
CB-17.1	018,020	4.0		<u>49</u>			
CB-17.2	018,020	4.0		<u>49</u>			
CB-17.3	018,020	4.0		<u>49</u>			
CB-18	018,020	3.0	6	<u>41 42 43</u>			
CB-20	018,020	2.0	9				
CB-21	018	2.0					
CB-22	018,020	3.0	10				
CB-23	018,020	2.0					
CB-24	019	2.0					

CHC  
A

FIRE PROCEDURE/ATTACHMENT CROSS REFERENCE

FIRE ZONE	DRAWING E-023-	FEP	MODIFIED BY ATTACHMENT II <u>PART NUMBER</u>				
			CRS	A RO	SE	AB (UPPER)	IB
AB-1.1.1	002	3.0	11				
AB-1.1.2	002	2.0					
AB-1.1.3	002,016	3.0	12				
AB-1.2	002	3.0	11				
AB-1.3	002	2.0					
AB-1.4	004,016	SEE PART 13	<u>13</u>				
AB-1.5	003	2.0					
AB-1.6	003	SEE PART 13	<u>13</u>				
AB-1.7	003	3.0					
AB-1.8.1	003,004	3.0	14				
AB-1.8.2	003,004	2.0	15				
AB-1.9	004,016	SEE PART 16	<u>16</u>				
AB-1.10	005,006,016	3.0	17				
AB-1.11	004,005,006	2.0					
AB-1.12	004,005,006	2.0					
AB-1.13	005	2.0					
AB-1.14	005	2.0					
AB-1.15	005,006	3.0					
AB-1.16	005,006	2.0					
AB-1.17	005,006	2.0					
AB-1.18.1	008,009,016,02 1	3.0	18	<u>41</u>	52		
AB-1.18.2	008,009,016	2.0	19				
AB-1.19	008	2.0					
AB-1.20	008,021	2.0					
AB-1.21.1	011	3.0		<u>41</u> <u>42</u>			
AB-1.21.2	011,016	2.0	20	<u>41</u>			
AB-1.22	011	2.0					
AB-1.23	011	2.0					
AB-1.24	011	2.0					



FIRE PROCEDURE/ATTACHMENT CROSS REFERENCE

FIRE ZONE	DRAWING E-023-	FEP	MODIFIED BY ATTACHMENT II <u>PART NUMBER</u>				
			CRS	A RO	SE	AB (UPPER)	IB
AB-1.25	011	2.0					
AB-1.26	011	2.0					
AB-1.27	011	2.0					
AB-1.28	011,014,016	2.0					
AB-1.29	011	2.0	10				
AB-1.30	014,016	2.0					
AB-1.31	014,016	2.0					
FH-1.1	005	3.0					
FH-1.2	005	2.0					
FH-1.3	005,008	2.0					
FH-1.4	005,008	2.0					
RB-1.1.1	005,016	2.0	21	<u>40</u>		54	
RB-1.1.2	005,015,016	3.0	22	<u>40</u>			
RB-1.2.1	005,008,011, 013,015,016	2.0		<u>42</u>			
RB-1.2.2	008,011,013, 015	3.0	22				
RB-1.2.3	008,011,013, 015	2.0		<u>40</u>			
RB-1.3.1	008	2.0					
RB-1.3.2	008,016	2.0	23	<u>42</u>		54	
RB-1.3.3	008,015,016	3.0	22				
RB-1.4.1	008,011,013, 015,016	2.0	23				
RB-1.4.2	011,013,015, 016	3.0	22				
RB-1.5	015,016	2.0					
IB-1	007,017	2.0					
IB-2	007,017	3.0	4				
IB-3	007,017	3.0	24			55	
IB-4	007,017	2.0	25			55	
IB-5	007	3.0	26			56	
IB-6	007,017	2.0					

FIRE PROCEDURE/ATTACHMENT CROSS REFERENCE

FIRE ZONE	DRAWING E-023-	FEP	MODIFIED BY ATTACHMENT II <u>PART NUMBER</u>				
			CRS	A RO	SE	AB (UPPER)	IB
IB-7.1	007	3.0					
IB-7.2	007	SEE PART 27	<u>27</u>				
IB-7.3	007	2.0					
IB-8	007	SEE PART 27	<u>27</u>				
IB-9	007	2.0					
IB-10	007,017	2.0	5				
IB-11	007	2.0	5,7				
IB-12	010	2.0	7				
IB-13	010	SEE PART 28	<u>28</u>				
IB-14	010	3.0	7	<u>42</u>			
IB-15	010	2.0	5	<u>45</u>			
IB-16	010,017	3.0					
IB-17	010,017	3.0	29	47	51		
IB-18	010,017	3.0					
IB-19	010,017	2.0					
IB-20	012,017	3.0	6	<u>42 43 44</u>	50		
IB-21.1	012,017	3.0		<u>42</u>			
IB-21.2	012,017	3.0		<u>42</u>			
IB-22.1	007	2.0	30	<u>44</u>	50		
IB-22.2	010,017	2.0	30	<u>44</u>	50		
IB-23.1	007,017	3.0					
IB-23.2	007,017	3.0					
IB-23.3	010,017	3.0					
IB-24	010,017	3.0					
IB-25.1.1	007	3.0	31				
IB-25.1.2	007,017	2.0	32	<u>40 43 44</u>	50	55	
IB-25.1.3	007,017	3.0	33	<u>45 46 48</u>	53		58
IB-25.1.4	007	3.0	31				
IB-25.1.5	007	SEE PART 34	<u>34</u>	<u>43 44</u>	CASE 1-50 CASE II-53		CASE II-58

FIRE PROCEDURE/ATTACHMENT CROSS REFERENCE

FIRE ZONE	DRAWING E-023-	FEP	MODIFIED BY ATTACHMENT II <u>PART NUMBER</u>				
			CRS	A RO	SE	AB (UPPER)	IB
IB-25.2	007	3.0	31				
IB-25.3.1	007	3.0	22	<u>46</u>	50		
IB-25.3.2	007	3.0	22	<u>46</u>	50		
IB-25.4	010,016	2.0	35	<u>40 41</u>	50		
IB-25.5.1	010	2.0	3	<u>46</u>	50		
IB-25.5.2	010	3.0	31		50		
IB-25.6.1	010,017	3.0	36	<u>43 45 47</u>	50,51	57	
IB-25.6.2	010,017	3.0	36	<u>43 45 47</u>	50,51	57	
IB-25.7	010,017	3.0	36	<u>43 45 47</u>	50,51	57	
IB-25.8	008,016	2.0	37	<u>41</u>	50		
IB-25.9	011,016	3.0	38	<u>41 42</u>			
IB-26	010	3.0					
IB-27	010	2.0			50		
DG-1.1	007,017	3.0					
DG-1.2	010,012,017	3.0					
DG-2.1	007	2.0					
DG-2.2	010,012	2.0					
YD-1	005	2.0					
YD-2.1	010	3.0					
YD-2.2	010	2.0					
MH-2.1	023	2.0					
MH-2.2	023	3.0					
SWPH-1	023	3.0					
SWPH-2	023	SEE PART 39	<u>39</u>				CASE II-59
SWPH-3	023	2.0					
SWPH-4.1	023	2.0					60
SWPH-4.2	023	2.0					60
SWPH-5.1.1	023	3.0					

FIRE PROCEDURE/ATTACHMENT CROSS REFERENCE

FIRE ZONE	DRAWING E-023-	FEP	MODIFIED BY ATTACHMENT II <u>PART NUMBER</u>				
			CRS	A RO	SE	AB (UPPER)	IB
SWPH-5.1.2	023	2.0					
SWPH-5.1.3	023	SEE PART 39	<u>39</u>				CASE II- 59
SWPH-5.2.1	023	3.0					
SWPH-5.2.2	023	2.0					
SWPH-5.2.3	023	SEE PART 39	<u>39</u>				CASE II- 59
SWPH-6	023	2.0					
TB-1	007	3.0	8	47	51		

CONTROL ROOM SUPERVISOR

Page 1 of 2

NOTE

This Part applies to fire in Zones CB-1.1 and CB-1.2.

1. Substitute the following equipment throughout FEP-2.0 and FEP-2.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
NI-33	NI-31	Reactor Power
XVT08100-CS	XVT-8112	Seal Return Isolation
Local Manual	Remote	IPV-2010
Local Manual	Remote	IFV-3556
Local Manual	Remote	XSW1DB Normal and Emerg Incoming Breakers, and Diesel Generator B Control

NOTE 2 and 3

Much Train B equipment is affected by this fire. XSW1DB should be rapidly de-energized locally, stripped, then should be energized from Diesel Generator B to power NI-33. Diesel Generator B Control will be local.

2. Verify the following conditions are met:
- a. The Intermediate Building Operator has reported Diesel Generator B in LOCAL.
  - b. The Auxiliary Building Upper Operator has reported that XSW1DB1 Main Incoming Breaker is open.
  - c. The Shift Engineer has reported XSW1DB and XSW1DB2 are stripped.
3. Have the Shift Engineer energize XSW1DB from Diesel Generator B.

CONTROL ROOM SUPERVISOR

PAGE 2 OF 2

4. Within eight hours, have Maintenance install temporary ventilation in place of the following fans:
  - a. XFN0133, AUX BLDG MCC-SWGR ROOM COOLING UNIT FAN (AB-463).
  - b. XFN0076, ESF SWGR ROOM 1DB AH UNIT SUPPLY FAN (IB-455).
  - c. XFN0106B, SPEED SWITCH ROOMS AH UNIT B SUPPLY FAN (IB-455).

A NUCLEAR REACTOR OPERATOR

Page 1 of 2

NOTE

1. Step 1 is an Immediate Action.
2. This Part is to be performed in conjunction with the duties specified by FEP-2.0.
3. This Part applies to fire in Zones CB-1.1 and CB-1.2.

1. De-energize the following by opening their respective Disconnect Switches located inside the Main Control Board:
  - a. Sub Panel-19A (XCP-6112):

	<u>Switch</u>	<u>Valve Number</u>
1)	DS-3	1-XVM-2801A 1-XVM-2801B 1-XVM-2801C A-XVT-2869A A-XVT-2869B A-XVT-2869C
2)	DS-4	PCV-2000A
3)	DS-5	PCV-2010A
4)	DS-6	PCV-2020A
5)	DS-32	IPV-445A
6)	DS-33	IPV-445B

A NUCLEAR REACTOR OPERATOR

Page 2 OF 2

b. Sub Panel-19B (XCP-6113):

	<u>Switch</u>	<u>Valve Number</u>
1)	DS-7	PCV-2000B
2)	DS-8	PCV-2010B
3)	DS-9	PCV-2020B
4)	DS-10	XVT-8153
5)	DS-11	XVT-8154
6)	DS-12	2-XVM-2801A 2-XVM-2801B 2-XVM-2801C B-XVT-2869A B-XVT-2869B B-XVT-2869C
7)	DS-13	XVT-8145
8)	DS-31	IPV-444B

2. Do not remove power from XSW1DB per FEP-2.0 because it is deenergized locally.



SHIFT ENGINEER

Page 1 of 5

NOTE

This Part applies to fire in Zones CB-1.1 and CB-1.2.

1. Obtain keys, radio and flashlight from the Control Room and proceed to XSW1DB Switchgear Room (IB-436).
2. Within 30 minutes, de-energize Bus 1DB as follows:
  - a. At XSW1DB 10, DIESEL GEN B XEG0001B-DG, perform the following:
    - 1) Open the following breakers inside XSW1DB 10:
      - a) XSW1DB 10 CCP1, CLOSING CNTRL PWR XEG0001B-DG (RRPA).
      - b) XSW1DB 10 CCP2, CLOSING CNTRL PWR XEG0001B-DG (RRP).
      - c) XSW1DB 10 TCP, TRIPPING CNTRL PWR XEG0001B-DG (RRT).
    - 2) Push the MANUAL TRIP on the 7.2 KV breaker.
  - b. At XSW1DB 01, BUS 1DB EMERG INCOMING BKR, perform the following:
    - 1) Open XSW1DB 01 TCP, TRIPPING CNTRL PWR EMERG INCM BKR (RRT).
    - 2) Open XSW1DB 01 CCP, CLOSING CNTRL PWR EMERG INCM BKR (RRP).
    - 3) Push the MANUAL TRIP on the 7.2 KV breaker.

SHIFT ENGINEER

Page 2 of 5

- c. At XSW1DB 16, BUS 1DB NORMAL INCOMING BKR, perform the following:
  - 1) Open XSW1DB 16 TJP, NORMAL INCM BKR TRIPPING CNTRL PWR.
  - 2) Open XSW1DB 16 CCP, NORMAL INCM BKR CLOSING CNTRL PWR.
  - 3) Push the MANUAL TRIP on the 7.2 KV breaker.
  
- 3. Within 30 minutes, strip XSW1DB as follows:
  - a. At XSW1DB 15, CHARGING INJ PUMP B XPP0043B-CS, perform the following:
    - 1) Place 43-CS06, XFER UNIT 15, to LOCAL.
    - 2) Momentarily place SS-CS06, UNIT 15, to STOP.
  
  - b. At XSW1DB 14, CHARGING INJ PUMP C, XPP0043C-CS, perform the following:
    - 1) Place 43-CS08, XFER UNIT 14, to LOCAL.
    - 2) Momentarily place SS-CS08, UNIT 14, to STOP.
  
  - c. At XSW1DB 13, CC PUMP B XPP0001B-CC, perform the following:
    - 1) Place 43-CC02, XFER UNIT 13, to LOCAL.
    - 2) Momentarily place SS-CC02, UNIT 13, to STOP.
  
  - d. At XSW1DB 11, CC PUMP C XPP0001C-CC, perform the following:
    - 1) Place 43-CC04, XFER UNIT 11, to LOCAL.
    - 2) Momentarily place SS-CC04, UNIT 11, to STOP.

SHIFT ENGINEER

Page 3 of 5

- e. At XSW1DB 07, TRANSF 1DB1 & 1DB2, perform the following:
- 1) Place 43-ES19, XFER UNIT 7, to LOCAL.
  - 2) Momentarily place SS-ES19, UNIT 7, to CLOSE.
- f. At XSW1DB 06, RB SPRAY PUMP XPP0038B-SP, perform the following:
- 1) Open XSW1DB 06 TCP, TRIPPING CNTRL PWR XPP0038B-SP (RRT).
  - 2) Open XSW1DB 06 CCP, CLOSING CNTRL PWR XPP0038B-SP (RRP).
  - 3) Push the MANUAL TRIP on the 7.2 KV breaker.
- g. At XSW1DB 05, PZR HTR BKUP GRP-2 XTF4102-RC, perform the following:
- 1) Open XSW1DB 05 TCP, TRIPPING CNTRL PWR XTF4102-RC (RRT).
  - 2) Open XSW1DB 05 CCP, CLOSING CNTRL PWR XTF4102-RC (RRP).
  - 3) Push the MANUAL TRIP on the 7.2 KV breaker.
- h. At XSW1DB 04, XSW1EB FDR BKR, perform the following:
- 1) Place 43-ES23, XFER UNIT 4, to LOCAL.
  - 2) Momentarily place SS-ES23, UNIT 4, to CLOSE.

SHIFT ENGINEER

Page 4 of 5

- i. At XSW1DB 03, EMERG FD WTR PUMP XPP0021B-EF, perform the following:
  - 1) Open XSW1DB 03 TCP, TRIPPING CNTRL PWR XPP0021B-EF (RRT).
  - 2) Open XSW1DB 03 CCP, CLOSING CNTRL PWR XPP0021B-EF (RRP).
  - 3) Push the MANUAL TRIP on the 7.2 KV breaker.
4. Within 30 minutes, strip loads from XSW1DB2 as follows:
  - a. At XSW1DB2 03A perform the following:
    - 1) Place 43-VU06, XFER UNIT 6C, to LOCAL.
    - 2) Momentarily place SS-VU06, UNIT 6C, to STOP.
    - 3) Place 43-VU08, XFER UNIT 5A, to LOCAL.
    - 4) Momentarily place SS-VU08, UNIT 5A, to STOP.
  - b. Open XSW1DB2 05B, FEEDER MCC 1DB2X XMC1DB2X-ES.
  - c. Open XSW1DB2 06B, FEEDER MCC 1DB2Y PRI UNIT 1AC SEC UNIT 25AD XMC1DB2Y-ES.
  - d. At XSW1DB2 03A, close the Main Incoming Breaker as follows:
    - 1) Place 43-ES37, XFER UNIT 4B, to LOCAL.
    - 2) Momentarily place SS-ES37, UNIT 4B, to CLOSE.
  - e. Report to the Control Room Supervisor that XSW1DB and XSW1DB2 are stripped.

SHIFT ENGINEER

Page 5 of 5

5. When directed, energize XSW1DB from Diesel Generator B as follows:
  - a. At XSW1DB 10, DIESEL GEN B XEG0001B-DG, perform the following:
    - 1) Close XSW1DB 10 CCP1, CLOSING CNTRL PWR XEG0001B-DG (RRPA).
    - 2) Ensure the 7.2 KV breaker closes.
  - b. If the Diesel Generator breaker does not close, proceed to Diesel Generator B and perform the following:
    - 1) Verify that LOCAL/REMOTE/MAINT switch is in LOCAL.
    - 2) Verify that the Diesel Generator is running with normal voltage and frequency indicated.
    - 3) Investigate and attempt to start the Diesel Generator and close the breaker as necessary.
6. Proceed to XPN-7200B, Control Room Evacuation Panel, and Start Service Water Pump B(C) as follows:
  - a. Place SW PUMP B XFER XPP-0039B, to LOCAL.
  - b. Place SW PUMP C TRAIN B XFER XPP-0039C, to LOCAL.
  - c. Start SW PUMP B, XPP-0039B, or SW PUMP C TRAIN B, XPP-0039C.
7. At XPN7300, Remote Source Range Instrument Panel, place N33 DET HIGH VOLTAGE, to ON.

AUXILIARY BLDG OPERATOR (UPPER)

Page 1 of 1

NOTE

1. This Part is to be performed in conjunction with the duties specified by FEP-2.0.
  2. This Part applies to fire in Zones CB-1.1 and CB-1.2.
- 
1. Within 30 minutes, immediately after completing FEP-2.0 ATTACHMENT XI, CROSS TRAIN CONNECTION OF BATTERY CHARGER XBC1A-1B, perform the following:
    - a. At XSW1DB1 03A (AB-463) open the main incoming breaker as follows:
      - 1) Place 43-ES36, XFER UNIT 4B, to LOCAL.
      - 2) Momentarily place SS-ES36, UNIT 4B, to OPEN.
      - 3) Report to the Control Room Supervisor that XSW1DB1 main incoming breaker is open.
  2. Within 90 minutes, close XVT08100-CS, RC PUMP SEAL RETURN HDR ISOL VLV (ORC) (AB-412 West Pen).

INTERMEDIATE BUILDING OPERATOR

Page 1 of 3

NOTE

1. Step 1 is an Immediate Action.
2. This Part is to be performed instead of FEP-2.0, Attachment IV.
3. This Part applies to fire in areas CB-1.1 and CB-1.2.

1. If directed by the Nuclear Reactor Operator At The Controls, trip the Reactor locally at XSW0001-CR (IB-463) by opening the following:
  - a. XSW0001-RTA, REACTOR TRIP BREAKER A.
  - b. XSW0001-RTB, REACTOR TRIP BREAKER B.
  - c. XSW0001-BYA, REACTOR TRIP BYPASS BREAKER A.
  - d. XSW0001-BYB, REACTOR TRIP BYPASS BREAKER B.
2. Obtain plant keys, tool bag, and flashlight from the IB-436.

NOTE 3

The Shift Engineer is de-energizing Bus 1DB, which will automatically start Diesel Generator B.

3. Place Diesel Generator B in LOCAL as follows (DB-436):
  - a. Place the REMOTE/LOCAL/MAINT Switch to LOCAL.
  - b. Notify the Control Room Supervisor that Diesel Generator B is in LOCAL.

INTERMEDIATE BUILDING OPERATOR

Page 2 of 3

4. Within 30 minutes, isolate blowdown by closing the following valves (TB-424):
  - a. XVT00542A-BD, SG A BLOWDOWN HEAT EXCHANGER INLET VLV.
  - b. XVT00542B-BD, SG B BLOWDOWN HEAT EXCHANGER INLET VLV.
  - c. XVT00542C-BD, SG C BLOWDOWN HEAT EXCHANGER INLET VLV.
5. Within 30 minutes, proceed to the Service Water Pump House and perform the following (SW-440):
  - a. At XSW1EB1 03A, close the main incoming breaker as follows:
    - 1) Place 43-ES40, XFER UNIT 4B, to LOCAL.
    - 2) Momentarily place SS-ES40, UNIT 4B, to CLOSE.
  - b. At XSW1EB 03, close the XSW1EB1 feeder breaker as follows:
    - 1) Place 43-ES21, XFER UNIT 3, to LOCAL.
    - 2) Momentarily place SS-ES21, UNIT 3, to CLOSE.
  - c. Start XFN80B-AH. SERVICE WATER BUILDING SUPPLY FAN B from XPN 5527, as follows (behind XSW1EB1):
    - 1) Place 43-AH327 XFER, XMC1EB1X U4FH, to LOCAL.
    - 2) Place SS-AH327X, XMC1EB1X U4FH, to START.



INTERMEDIATE BUILDING OPERATOR

Page 3 of 3

- d. Reposition Service Water Pump House ventilation dampers by isolating Instrument Air to the Service Water Pump House as follows (behind XSW1EB):
- 1) Close XVA 2969-SA, SW PUMP HOUSE INST AIR HDR SUPPLY VALVE.
  - 2) Open XVT22923-SA, SW SA SUPPLY HEADER LOW POINT DRAIN VLV, to depressurize the header.

NOTE 6

Frequent trips will be required out of the high noise area to communicate with the Control Room Supervisor at the CREP.

6. Proceed to Diesel Generator B and monitor its operation.
7. Within 30 minutes, start XFN-45A(B), DG AREA B VENTILATION AIR SUPPLY FAN A(B), from XPN 5526-AH (DB-436) as follows:
  - a. Place 43-AH164 XFER, XMC1DB2Z U3AC, to LOCAL.
  - b. Place SS-AH164X, XMC1DB2Z U3AC, to START.
  - c. Place 43-AH165 XFER, XMC1DB2Z U2AC, to LOCAL.
  - d. Place SS-AH165X, XMC1DB2Z U2AC, to START.

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone CB-2.
2. PART ARO-43, 44 and SE-50 are also applicable to this zone.

1. Substitute the following equipment throughout FEP-2.0 and FEP-2.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
Local Manual	Remote	IFV-3541
Local Manual	Remote	IPV-2010
Attachment IV (FEP-2.1)	TR-604A	RHR Temperature

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zones CB-5 and IB-25.5.1.
2. PART 4 is also applicable to Zone CB-5.
3. PARTS ARO-46 and SE-50 are also applicable to Zone IB-25.5.1.

1. Substitute the following equipment throughout FEPs:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
Local Manual	Remote	IPV-2020

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zones CB-5 and IB-2.
2. PART 3 is also applicable to Zone CB-5.

1. Substitute the following equipment throughout FEP-3.0 and FEP-3.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
TI-430A (CREP)	TI-430	Loop C T-Cold
TI-433A (CREP)	TI-433	Loop C T-Hot

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zones CB-7, CB-12, IB-10, IB-11 and IB-15.
2. PARTS 6, ARO-40, 43, 44, SE-50 and AB-54 are also applicable to Zone CB-12.
3. PART 7 is also applicable to Zone IB-11.
4. PART ARO-45 is also applicable to Zone IB-15.

1. Substitute the following equipment throughout FEP-2.0 and FEP-2.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
Local Manual	Remote	IFV-3541

2. Within eight hours, if XFN-38A and XFN-39A are not available have temporary ventilation installed in Battery Charger A room.

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zones CB-10, CB-12, CB-18 and IB-20.
2. PARTS 7, 8, ARO-42, 43, 44 47, SE-50 and 51 are also applicable to Zone CB-10.
3. PARTS 5, ARO-40, 43, 44, SE-50 and AB-54 are also applicable to Zone CB-12.
4. PARTS ARO-41, 42 and 43 are also applicable to Zone CB-18.
5. PARTS ARO-42, 43, 44 and SE-50 are also applicable to Zone IB-20.

1. Substitute the following equipment throughout FEPs:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
Local Manual	Remote	All Steam Generator PORV's

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zones CB-10, IB-11, IB-12, and IB-14.
2. PART 5 is also applicable to Zone IB-11.
3. PART ARO-42 is also applicable to Zone IB-14.
4. PARTS 6, 8, ARO-42, 43, 44, 47, SE-50 and 51 are also applicable to Zone CB-10.

1. Substitute the following equipment throughout FEPs:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
Local	Remote	C Chiller

2. Within 90 minutes, have the Intermediate Building Operator place VU Chiller C in LOCAL at XPN-7208 (IB-412).

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zones TB-1 and CB-10.
2. PARTS ARO-47 and SE-51 are also applicable to Zone TB-1.
3. PARTS 6, 7, ARO-42, 43, 44, 47, SE-50 and 51 are also applicable to Zone CB-10.

NOTE 1

This fire can cause control problems with Bus 1DB normal and emergency incoming breakers and with Diesel Generator B remote control. The A Nuclear Reactor Operator will coordinate with the Shift Engineer to establish local control.

1. Use local control of Diesel Generator B throughout FEP-3.0 and FEP-3.1.



CONTROL ROOM SUPERVISOR

NOTE

This Part applies to fire in Zone CB-20.

1. Substitute the following equipment throughout FEP-2.0 and FEP-2.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
PI-402	PI-403	RCS Pressure
FEP-2.1 Attachment IV	TR-604A	RHR Temperature

CONTROL ROOM SUPERVISOR

NOTE

This Part applies to fire in Zones CB-22 and AB-1.29.

1. Substitute the following equipment throughout FEPs:

Use

Instead Of

For

Plant Page

Radios

Communication

CONTROL ROOM SUPERVISOR

NOTE

This Part applies to fire in Zones AB-1.1.1 and AB-1.2.

1. Use FEP-3.1 Attachment IV for monitoring RHR Temperature when implementing FEP-3.1.

CONTROL ROOM SUPERVISOR

NOTE

This Part applies to fire in Zone AB-1.1.3.

NOTE 1

The cable supplying XPP-31B, RHR PUMP B, and XFN-49B, RHR/SPRAY PUMP ROOM 2 COOLING UNIT FAN, are routed through fire Zone AB-1.1.3.

1. If cable tray 2017 has been damaged, direct the Emergency Maintenance Team to install a temporary cable for RHR Pump B per EMP-100.002, prior to reaching 350 degrees RCS Temperature, and rig temporary ventilation for RHR B Room cooling.

CONTROL ROOM SUPERVISOR

NOTE

1. Step 1 is an Immediate Action.
2. This Part applies to fire in Zones AB-1.4 and AB-1.6.
3. Charging Pump C will not be available due to the fire.
4. The fire may have to be extinguished before the AB Operator can open LCV00115B(D)-CS, XVG08131A-CS, XVG08131B-CS, XVG08132A-CS, XVG08132B-CS, XVG08133A-CS, and XVG08133B-CS, to establish Seal Injection (90 minute action).

CASE I - Charging Pump A - OPERABLE

1. Implement FEP-2.0.

CASE II - Charging Pump A - INOPERABLE

1. Implement FEP-3.0.

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone AB-1.8.1.
2. The fire may have to be extinguished before the AB Operator can close XVG03001A-SP, RB SPRAY PP A RWST SUCTION HDR VALVE, and XVG08812A-SI, RH PUMP A SUCTION HEADER VALVE (30 minute action).

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone AB-1.8.2.
2. The fire may have to be extinguished before the AB Operator can close XVG03001B-SP, RB SPRAY PP B RWST SUCTION HDR VALVE, and XVG08812B-SI, RH PUMP B SUCTION HEADER VALVE (30 minute action).

1. Substitute the following equipment throughout FEP-2.0 and FEP-2.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
FEP-2.0 Attachment VIII	Remote	Charging Pump C (XSW1DA)
FEP-2.1 Attachment IV	TR-604A	RHR Temperature

CONTROL ROOM SUPERVISOR

NOTE

1. Step 1 is an Immediate Action.
2. This Part applies to fire in Zone AB-1.9.
3. Charging Pump C will not be available due to the fire.

CASE I - Charging Pump B - OPERABLE

1. Implement FEP-3.0.

CASE II - Charging Pump B - INOPERABLE

1. Implement FEP-2.0.



CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone AB-1.10.
2. The fire may have to be extinguished before the AB Operator can close LCV00115E-CS, VOLUME CONTROL TANK OUTLET HDR ISOL. VLV, and open XVG08106-CS, CHARGING PUMPS MINI FLOW HDR ISOL VALVE, to establish Seal Injection (90 minute action).

1. Substitute the following equipment throughout FEP-3.0 and FEP-3.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
TI-430A (CREP)	TI-430	Loop C T-Cold
TI-433A (CREP)	TI-433	Loop C T-Hot

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone AB-1.18.1.
2. PARTS ARO-41 and SE-52 are also applicable to this zone.

1. Substitute the following equipment throughout FEP-3.0 and FEP-3.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
Local Manual	Remote	IPV-2000
Local Manual	Remote	XSW1DB1 Main Incoming Breaker

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone AB-1.18.2.
  2. The fire may have to be extinguished before the AB Operator can open XVT08389-CS, SEAL INJECTION HEADER FLOW BYPASS VALVE, to establish Seal Injection (90 minute action).
- 
1. Use Attachment IV for monitoring RHR temperature in FEP-2.1.

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zones AB-1.21.2.
2. PART ARO-41 is also applicable to this zone.

1. Substitute the following equipment throughout FEP-2.0 and FEP-2.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
Local Manual	Remote	IPV-2000
PI-402	PI-403	RCS Pressure
FEP-2.1 Attachment IV	TR-604A	RHR Temperature
Plant Page	Radios	Communication

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone RB-1.1.1.
2. PARTS ARO-40 and AB-54 are also applicable to this zone.

1. Substitute the following equipment throughout FEP-2.0 and FEP-2.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
PI-402	PI-403	RCS Pressure
PI-484 and Steam Tables	TI-420	RCS T-Cold
XVT08100-CS	XVT-8112	Seal Return Isolation

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zones RB-1.1.2, RB-1.2.2, RB-1.3.3, RB-1.4.2, IB-25.3.1 and IB-25.3.2.
2. PART ARO-40 is also applicable to Zone RB-1.1.2 only.
3. PARTS ARO-46 and SE-50 are also applicable to Zones IB-25.3.1 and IB-25.3.2 only.

NOTE 1

For fire in these zones, Steam Generator A and its associated instrumentation will be the most reliable.

1. Substitute the following equipment throughout FEP-3.0 and FEP-3.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
LI-462	LI-461	Pressurizer Level
LI-475	LI-496	Steam Generator Level
PI-475	PI-495	Steam Generator Pressure
PI-2000	PI-2020	Main Steam Line Pressure
IPV-2000	IPV-2020	Steam Generator PORV
IFV-3531	IFV-3551	Steam Generator Feed
TI-410	TI-430	RCS T-Cold
ITE-0413A (CREP) (TI-413(MCB) for RB-1.4.2 only)	TI-433	RCS T-Hot
NI-32 (NI-31 for RB-1.2.2 only)	NI-33	Reactor Power

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zones RB-1.3.2 and RB-1.4.1.
2. PARTS ARO-42 and AB-54 are also applicable to Zone RB-1.3.2 only.

1. Substitute the following instrumentation throughout FEP-2.0 and FEP-2.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
LI-462	LI-459	Pressurizer Level

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone IB-3.
2. PART AB-55 is also applicable to this zone.

NOTE 1

Train A control power will be lost when the battery discharges. Local manual control of all Steam Generator PORVs will be necessary.

1. Substitute the following equipment throughout FEP-3.0 and FEP-3.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
PI-495 and Steam Tables	TI-430	RCS T-Cold
TI-433A (CREP)	TI-433	RCS T-Hot
Local Manual	Remote	All Steam Generator PORVs



CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone IB-4.
2. PART AB-55 is also applicable to this zone.

NOTE 1

Train B control power will be lost when the battery discharges. Local manual control of the emergency feed valves and Steam Generator PORVs will be necessary.

1. Substitute the following equipment throughout FEP-2.0 and FEP-2.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
PI-484 and Steam Tables	TI-420	RCS T-Cold
Local Manual	Remote	All Steam Generator PORVs
Local Manual	Remote	IFV-3531, 3541 and 3551

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone IB-5.
2. PART AB-56 is also applicable to this zone.

NOTE 1

For this fire zone Battery Charger 1A-1B will not be available. The AB Operator removes unnecessary loads from DPN1HA and DPN1HA1. Local manual control of all Steam Generator PORVs will be necessary.

1. Substitute the following equipment throughout FEP-3.0 and FEP-3.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
TI-430A (CREP)	TI-430	RCS T-Cold
TI-433A (CREP)	TI-433	RCS T-Hot
Local Manual	Remote	All Steam Generator PORVs

CONTROL ROOM SUPERVISOR

NOTE

1. Step 1 is an Immediate Action.
2. This Part applies to fire in Zones IB-7.2 and IB-8.

CASE I - Chiller A - OPERABLE

1. Implement FEP-2.0.

CASE II - Chiller A - INOPERABLE

1. Implement FEP-3.0.

CONTROL ROOM SUPERVISOR

NOTE

1. Step 1 is an Immediate Action.
2. This Part applies to fire in Zone IB-13.

CASE I - Component Cooling Pump A - OPERABLE

1. Implement FEP-2.0.

CASE II - Component Cooling Pump A - INOPERABLE

1. Implement FEP-3.0.

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone IB-17.
2. PARTS ARO-47 and SE-51 are also applicable to this zone.

NOTE 1

This fire can cause control problems with Bus 1DB normal and emergency incoming breakers and with Diesel Generator B remote control. The A Nuclear Reactor Operator will coordinate with the Shift Engineer to establish local control.

1. Substitute the following equipment throughout FEP-3.0 and FEP-3.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
Local	Remote	VU Chiller C
Portable Ventilation	XFN-76	Cooling 1DB Switchgear Room
Local	Remote	Diesel Generator B

2. Within 90 minutes, have the IB Operator place VU Chiller C in LOCAL at XPN-7208 (IB-412).
3. Within eight hours, if XFN-76, 1DB Cooling Fan is disabled, have maintenance or the fire brigade rig temporary fans.

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zones IB-22.1 and IB-22.2.
2. PARTS ARO-44 and SE-50 are also applicable to these zones.

1. Substitute the following equipment throughout FEP-2.0 and FEP-2.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
Local Manual	Remote	IFV-3541
Local Manual	Remote	PCV-2000
FEP-2.0 Attachment IX	Remote	XFN-38A, Battery Room Fan (1DA2X)

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zones IB-25.1.1, IB-25.1.4, IB-25.2 and IB-25.5.2.
2. PART SE-50 is also applicable to Zone IB-25.5.2 only.

1. Substitute the following instrumentation throughout FEP-3.0 and FEP-3.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
LI-462	LI-461	Pressurizer Level
LI-497	LI-496	Steam Generator C Level
PI-2020	PI-495	Steam Generator C Pressure

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone IB-25.1.2.
2. PARTS ARO-40, 43, 44 and SE-50 are also applicable to this zone.

1. Substitute the following equipment throughout FEP-2.0 and FEP 2.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
Local Manual	Remote	All Steam Generator PORVs
Local Manual	Remote	IFV-3541
Local (XPN-7208)	Remote	VU Chiller C
Attachment VIII (XSW1DA1)	Remote	XPP-45A, SW Booster Pump
Attachment IX (XSW1DA2X)	Remote	XFN-38A, Battery Room Fan

2. Within 90 minutes, have the IB Operator place VU Chiller C in LOCAL at XPN-7208 (IB-412).



CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone IB-25.1.3.
2. PARTS ARO-45, 46, 48, SE-53 and IB-58 are also applicable to this zone.

1. Substitute the following equipment throughout FEP-3.0 and FEP-3.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
LI-462	LI-461	Pressurizer Level
LI-497	LI-496	Steam Generator C Level
PI-2020	PI-495	Steam Generator C Pressure
Local Manual	Remote	IPV-2020
TDEFP Speed	Flow Control Valves	Controlling Steam Generator Level
TDEFP	MDEFP B	Steam Generator Feed

CONTROL ROOM SUPERVISOR

NOTE

1. Step 1 is an Immediate Action.
2. This Part applies to fire in Zone IB-25.1.5.
3. PARTS ARO-43, 44, SE-50 (CASE I), SE-53 (CASE II), and IB-58 (CASE II) are also applicable to this zone.

CASE I - Component Cooling Pump A - OPERABLE

1. Implement FEP-2.0, modified by PARTS ARO-43, ARO-44 and SE-50.
2. Substitute the following equipment throughout FEP-2.0 and FEP-2.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
PI-2010	PI-484	Steam Generator B Pressure
Local Manual	Remote	IFV-3541
Local Manual	Remote	All Steam Generator PORVs

CASE II - Component Cooling Pump A - INOPERABLE

1. Implement FEP-3.0, modified by PARTS ARO-43, ARO-44, SE-53 and IB-58.
2. Substitute the following equipment throughout FEP-3.0 and FEP-3.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
LI-462	LI-461	Pressurizer Level
LI-497	LI-496	Steam Generator C Level
NI-32	NI-33A	Reactor Power
TDEFP	MDEFP B	Steam Generator Feed
Local Manual	Remote	IFV-3556

Use

Instead Of

For

Local Manual

Remote

All Steam Generator PORVs

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone IB-25.4.
2. PARTS ARO-40, 41 and SE-50 are also applicable to this zone.

1. Substitute the following equipment throughout FEP-2.0 and FEP-2.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
PI-484 and Steam Tables	TI-420	RCS T-Cold

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zones IB-25.6.1, IB-25.6.2 and IB-25.7.
2. PARTS ARO-43, 45, 47, SE-50, 51 and AB-57 are also applicable to these zones.

NOTE 1

This fire can cause control problems with Bus 1DB normal and emergency incoming breakers and with Diesel Generator B remote control. The A Nuclear Reactor Operator will coordinate with the Shift Engineer to establish local control.

1. Substitute the following equipment throughout FEP-3.0 and FEP-3.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
LI-462	LI-461	Pressurizer Level
LI-497	LI-496	Steam Generator C Level
PI-2020	PI-495	Steam Generator C Pressure
Local Manual	Remote	IPV-2010, 2020
Local	Remote	Diesel Generator B
Local	Remote	VU Chiller C
Local (AB-388)	Remote	XFN-47 (Charging Pump C Room Fan)

2. This fire can damage both the radio system and the plant page. Use Channel 2 on the radios, or runners if needed.
3. Within 90 minutes, have the IB Operator place VU Chiller C in LOCAL on XPN-7208 (IB-412).

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone IB-25.8.
2. PARTS ARO-41 and SE-50 are also applicable to this zone.

1. Substitute the following equipment throughout FEP-2.0 and FEP-2.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
Local Manual	Remote	IPV-2000

CONTROL ROOM SUPERVISOR

NOTE

1. This Part applies to fire in Zone IB-25.9.
2. PARTS ARO-41 and ARO-42 are also applicable to this zone.

1. Substitute the following equipment throughout FEP-3.0 and FEP-3.1:

<u>Use</u>	<u>Instead Of</u>	<u>For</u>
LI-462	LI-461	Pressurizer Level
LI-497	LI-496	Steam Generator C Level
Local Manual	Remote	IPV-2000

CONTROL ROOM SUPERVISOR

NOTE

1. Step 1 is an Immediate Action.
2. This Part applies to fire in Zones SWPH-2, SWPH-5.1.3 and SWPH-5.2.3.
3. PART IB-59 is also applicable to these zones (CASE II only).

CASE I - Service Water Pump A - OPERABLE

1. Implement FEP-2.0.

CASE II - Service Water Pump A - INOPERABLE

1. Implement FEP-3.0, modified by PART IB-59.



A NUCLEAR REACTOR OPERATOR

NOTE

1. Step 1 is an Immediate Action.
2. This Part is to be performed in conjunction with the duties specified by FEP-2.0 (3.0).
3. This Part applies to fire in Zones CB-12, RB-1.1.1, RB-1.1.2, RB-1.2.3, IB-25.1.2 and IB-25.4.

1. De-energize the following by opening their respective Disconnect Switches located inside the Main Control Board:

- a. Sub Panel-19B (XCP-6113):

<u>Switch</u>	<u>Valve Number</u>
1) DS-10	XVT-8153
1) DS-11	XVT-8154

A NUCLEAR REACTOR OPERATOR

NOTE

1. Step 1 is an Immediate Action.
2. This Part is to be performed in conjunction with the duties specified by FEP-2.0 (3.0).
3. This Part applies to fire in Zones CB-18, AB-1.18.1, AB-1.21.1, AB-1.21.2, IB-25.4, IB-25.8, and IB-25.9.

1. De-energize the following by opening their respective Disconnect Switches located inside the Main Control Board:

- a. Sub Panel-19A (XCP-6112):

Switch

Valve Number

1) DS-4

PCV-2000A

- b. Sub Panel-19B (XCP-6113):

Switch

Valve Number

1) DS-7

PCV-2000B

A NUCLEAR REACTOR OPERATOR

NOTE

1. Step 1 is an Immediate Action.
2. This Part is to be performed in conjunction with the duties specified by FEP-2.0(3.0).
3. This Part applies to fire in Zones CB-10, CB-18, AB-1.21.1, RB-1.2.1, RB-1.3.2, IB-14, IB-20, IB-21.1, IB-21.2 and IB-25.9.

1. De-energize the following by opening their respective Disconnect Switches located inside the Main Control Board:
  - a. Sub Panel-19A (XCP-6112):

<u>Switch</u>	<u>Valve Number</u>
1) DS-1	ILV-459 XVT-8146
2) DS-2	ILV-460 XVT-8147

A NUCLEAR REACTOR OPERATOR

NOTE

1. Step 1 is an Immediate Action.
2. This Part is to be performed in conjunction with the duties specified by FEP-2.0(3.0).
3. This Part applies to fire in Zones CB-2, CB-10, CB-12, CB-18, IB-20, IB-25.1.2, IB-25.1.5, IB-25.6.1, IB-25.6.2 and IB-25.7.

1. De-energize the following by opening their respective Disconnect Switches located inside the Main Control Board:

- a. Sub Panel-19A (XCP-6112):

<u>Switch</u>	<u>Valve Number</u>
1) DS-5	PCV-2010A
2) DS-6	PCV-2020A

- b. Sub Panel-19B (XCP-6113):

<u>Switch</u>	<u>Valve Number</u>
1) DS-8	PCV-2010B
2) DS-9	PCV-2020B

A NUCLEAR REACTOR OPERATOR

NOTE

1. Step 1 is an Immediate Action.
2. This Part is to be performed in conjunction with the duties specified by FEP-2.0(3.0).
3. This Part applies to fire in Zones CB-2, CB-10, CB-12, IB-20, IB-22.1, IB-22.2, IB-25.1.2 and IB-25.1.5.

1. De-energize the following by opening their respective Disconnect Switches located inside the Main Control Board:

- a. Sub Panel-19A (XCP-6112):

<u>Switch</u>	<u>Valve Number</u>
1) DS-3	1-XVM-2801A 1-XVM-2801B 1-XVM-2801C A-XVT-2869A A-XVT-2869B A-XVT-2869C
2) DS-4	PCV-2000A

- b. Sub Panel-19B (XCP-6113):

<u>Switch</u>	<u>Valve Number</u>
1) DS-7	PCV-2000B
2) DS-12	2-XVM-2801A 2-XVM-2801B 2-XVM-2801C B-XVT-2869A B-XVT-2869B B-XVT-2869C

A NUCLEAR REACTOR OPERATOR

NOTE

1. Step 1 is an Immediate Action.
2. This Part is to be performed in conjunction with the duties specified by FEP-2.0(3.0).
3. This Part applies to fire in Zones IB-15, IB-25.1.3, IB-25.6.1, IB-25-6.2 and IB-25.7.

1. De-energize the following by opening their respective Disconnect Switches located inside the Main Control Board:

- a. Sub Panel-19A (XCP-6112):

<u>Switch</u>	<u>Valve Number</u>
1) DS-3	1-XVM-2801A 1-XVM-2801B 1-XVM-2801C A-XVT-2869A A-XVT-2869B A-XVT-2869C

- b. Sub Panel-19B (XCP-6113):

<u>Switch</u>	<u>Valve Number</u>
1) DS-12	2-XVM-2801A 2-XVM-2801B 2-XVM-2801C B-XVT-2869A B-XVT-2869B B-XVT-2869C

A NUCLEAR REACTOR OPERATOR

NOTE

1. Step 1 is an Immediate Action.
2. This Part is to be performed in conjunction with the duties specified by FEP-2.0(3.0).
3. This Part applies to fire in Zones IB-25.1.3, IB-25.3.1, IB-25.3.2 and IB-25.5.1.

1. De-energize the following by opening their respective Disconnect Switches located inside the Main Control Board:

- a. Sub Panel-19A (XCP-6112):

Switch

Valve Number

1) DS-6

PCV-2020A

- b. Sub Panel-19B (XCP-6113):

Switch

Valve Number

1) DS-9

PCV-2020B

A NUCLEAR REACTOR OPERATOR

NOTE

1. This Part is to be performed in conjunction with the duties specified by FEP-3.0.
  2. This Part applies to fire in Zones CB-10, IB-17, IB-25.6.1, IB-25.6.2, IB-25.7 and TB-1.
- 
1. When establishing power to Bus 1DB from Diesel Generator B, it must be performed locally. Contact the Shift Engineer and direct him to perform PART SE-51.



A NUCLEAR REACTOR OPERATOR

NOTE

1. This Part is to be performed in addition to the duties specified by FEP-3.0.
2. This Part applies to fire in Zone IB-25.1.3.

1. After FEP-3.0, Attachment III is completed, perform the following:
  - a. Remove the following fuses inside the MCB:
    - 1) FU-EF38A for FCV-3546 (XCP-6111).
    - 2) FU-EF39A for FCV-3556 (XCP-6111).

A NUCLEAR REACTOR OPERATOR

NOTE

1. Step 1 is an Immediate Action.
  2. This Part is to be performed in conjunction with the duties specified by FEP-4.0.
  3. This Part applies to fire in Zones CB-17.1, CB-17.2 and CB-17.3.
- 
1. Open the disconnects in the Termination Cabinets (CB-448) instead of inside the MCB.

SHIFT ENGINEER

NOTE

This Part applies to fire in Zones CB-2, CB-10, CB-12, IB-20, IB-22.1, IB-22.2, IB-25.1.2, IB-25.1.5 CASE I, IB-25.3.1, IB-25.3.2, IB-25.4, IB-25.5.1, IB-25.5.2, IB-25.6.1, IB-25.6.2, IB-25.7, IB-25.8 and IB-27.

1. Within 30 minutes, isolate blowdown by closing the following valves (TB-424):
  - a. XVT00542A-BD, SG A BLOWDOWN HEAT EXCHANGER INLET VLV.
  - b. XVT00542B-BD, SG B BLOWDOWN HEAT EXCHANGER INLET VLV.
  - c. XVT00542C-BD, SG C BLOWDOWN HEAT EXCHANGER INLET VLV.

SHIFT ENGINEER

NOTE

This Part applies to fire in Zones CB-10, IB-17, IB-25.6.1, IB-25.6.2, IB-25.7 and TB-1.

1. When directed, de-energize Bus 1DB (IB-436) as follows:
  - a. At XSW1DB 01, BUS 1DB EMERG INCOMING BKR, perform the following:
    - 1) Open XSW1DB 01 CCP, CLOSING CNTRL PWR EMERG INCM BKR (RRP).
    - 2) Open XSW1DB 01 TCP, TRIPPING CNTRL PWR EMERG INCM BKR (RRT).
    - 3) Push MANUAL TRIP on 7.2KV breaker.
  - b. At XSW1DB 16, BUS 1DB NORMAL INCOMING BKR, perform the following:
    - 1) Open XSW1DB 16 CCP, NORMAL INCM BKR CLOSING CNTRL PWR.
    - 2) Open XSW1DB 16 TCP, NORMAL INCM BKR TRIPPING CNTRL PWR.
    - 3) Push MANUAL TRIP on 7.2KV breaker.
2. Go to Diesel Generator B (DB-436) and perform the following:
  - a. Place the REMOTE/LOCAL/MAINT switch to LOCAL.
  - b. Verify the Diesel Generator is running with the output breaker closed.

NOTE 2.c

- 1) XSW1DB 10 TCP, TRIPPING CNTRL PWR XEG0001B-DG (RRT) for Diesel Generator B must remain closed.
- 2) Electrical jumpers or lifted lead procedures must not be used to close the Diesel Generator output breaker.

- c. If the Diesel Generator B output breaker is not closed, investigate cause and attempt to start Diesel locally and close its output breaker.

SHIFT ENGINEER

NOTE

This Part applies to fire in Zone AB-1.18.1.

1. Obtain keys and flashlight from the Control Room.
2. Close XSW1DB1 04B, MAIN INCOMING BREAKER as follows (AB-463):
  - a. Place 43-ES36, XFER UNIT 4B, to LOCAL.
  - B. Momentarily place SS-ES36, UNIT 4B, to CLOSE.

SHIFT ENGINEER

NOTE

This Part applies to fire in Zones IB-25.1.3 and IB-25.1.5 CASE II.

1. Obtain keys and flashlight from the Control Room.
2. Within 30 minutes, start the Turbine Driven Emergency Feed Pump as follows:
  - a. Open XVG02802B-MS, MS HEADER C EF PUMP TURBINE SUPPLY VLV (IB-436 East Pen).
  - b. Take the emergency stairs to the IB-412 (next to TDEFP Room).
  - c. If necessary, reset the throttle valve XVT02865-MS, EF PUMP TURB MAIN STEAM THROTTLE VALVE (IB-412).
  - d. Open IFV02030-MS, EF PUMP TURB STEAM SUPPLY FLOW CONT VLV as follows (IB-412):
    - 1) Close IFV02030-AV1 MS, IA ISOLATION VALVE FOR IFV2030-MS.
    - 2) Vent IFV02030-PR1-MS, IA SUPPLY PRESS REG FOR IFV2030-MS.
  - e. Ensure full turbine speed as follows (IB-412):
    - 1) Close ISY02034-AV1-MS, IA ISOLATION VALVE FOR ISY2034.
    - 2) Vent ISY02034-PR1-MS, IA SUPPLY PRESS REG FOR ISY2034.
  - f. Verify Turbine speed increases to greater than 4000 RPM on ISI13505-EF (EF Pump Turbine Tachometer).
3. Close the following drains (IB-412):
  - a. XVT02803A-MS, EF PP TURB MS THROTTLE VLV DRAIN VLV A.
  - b. XVTO2804A-MS, EF PUMP TURBINE CASING STEAM DRAIN VLV.

- c. XVT02804B-MS, EF PUMP TURBINE CASING STEAM DRAIN VLV.
4. Within 30 minutes, feed the steam generators as follows:
- a. Evaluate local instrumentation. The most reliable instrument for all fires is LI-497B, SC C WIDE RANGE LEVEL (CREP).
  - b. Coordinate with the Control Room Supervisor to maintain between 50% and 60% WIDE RANGE LEVEL by throttling the following (IB-423):
    - 1) IFV03536-EF, SG A TURB DR EF PUMP FLOW CONTROL VALVE.
    - 2) IFV03546-EF, SG B TURB DR EF PUMP FLOW CONTROL VALVE.
    - 3) IFV03556-EF, SG C TURB DR EF PUMP FLOW CONTROL VALVE.
  - c. If Control Valves cannot be throttled, then adjust Turbine speed to control feed rate.



AUXILIARY BUILDING UPPER OPERATOR

NOTE

1. This Part is to be performed in conjunction with the duties specified by FEP-2.0.

2. This Part applies to fire in Zones CB-12, RB-1.1.1 and RB-1.3.2.

1. Within 90 minutes, close XVT08100-CS, RC PUMP SEAL RETURN HDR ISOL. VLV (ORC)(AB-412 West Pen).

AUXILIARY BUILDING UPPER OPERATOR

NOTE

1. This Part is to be performed in conjunction with the duties specified by FEP-2.0(3.0).
  2. This Part applies to fire in Zones IB-3, IB-4, and IB-25.1.2.
- 
1. Do not perform FEP-2.0(3.0) ATTACHMENT XI, CROSS TRAIN CONNECTION OF BATTERY CHARGER XBC1A-1B.

AUXILIARY BUILDING UPPER OPERATOR

NOTE

1. This Part is to be performed in conjunction with the duties specified by FEP-3.0.
  2. This Part applies to fire in Zone IB-5.
- 
1. Do not perform FEP-3.0, ATTACHMENT XI, CROSS TRAIN CONNECTION OF BATTERY CHARGER XBC1A-1B.
  2. Contact the Control Room and verify that Bus 1DA has been de-energized, then perform the following (IB-412):
    - a. Open all breakers on DPN-1HA except M and 19 .
    - b. Open all breakers on DPN-1HA1 except 10.

AUXILIARY BUILDING UPPER OPERATOR

NOTE

1. This Part is to be performed in conjunction with the duties specified by FEP-3.0.
  2. This Part applies to fire in Zones IB-25.6.1, IB-25.6.2 and IB-25.7.
- 
1. Within 90 minutes, start XFN47 at XPN-5529-VL as follows (AB-388, behind Charging Pump C Transfer Switch):
    - a. Place 43-VL07 XFER, XPN0040 (XFN47) in LOCAL.
    - B. Place SS-VL07X, XPN0040 (XFN47) to START.

INTERMEDIATE BUILDING OPERATOR

NOTE

1. This Part is to be performed in conjunction with the duties specified by FEP-3.0.
  2. This Part applies to fire in Zones IB-25.1.3 and IB-25.1.5 CASE II.
- 
1. Within 30 minutes, isolate blowdown by closing the following valves (TB-424):
    - a. XVT00542A-BD, SG A BLOWDOWN HEAT EXCHANGER INLET VLV.
    - b. XVT00542B-BD, SG B BLOWDOWN HEAT EXCHANGER INLET VLV.
    - c. XVT00542C-BD, SG C BLOWDOWN HEAT EXCHANGER INLET VLV.

INTERMEDIATE BUILDING OPERATOR

NOTE

1. This Part is to be performed in conjunction with the duties specified by FEP-3.0.
  2. This Part applies to fire in Zones (CASE II only) SWPH-2, SWPH-5.1.3 and SWPH-5.2.3.
- 
1. Within 90 minutes, start XFN-80B-AH (SW-440, behind XSW1EB1) as follows:
    - a. Place 43-AH327 XFER, XMC1EB1X U4FH in LOCAL.
    - B. Place SS-AH-327X, XMC1EB1X U4FH to START.

INTERMEDIATE BUILDING OPERATOR

NOTE

1. This Part is to be performed in addition to the duties specified by FEP-2.0.
  2. This Part applies to fire in Zones SWPH-4.1 and SWPH-4.2.
- 
1. After completing FEP-2.0 ATTACHMENT IV, provide portable ventilation equipment to cool the Service Water Pump Room and the XSW1EA Switchgear Room.