NRC2007-Inp01

TITLE	**Locally Restore CR Ventilation per 01-OHP-4025-R-14**	**REVISION**	**0**
PROGRAM	**Initial Licensed Operator (ILT)**	**TIME**	**20 Minutes**

SCOPE OF REVISION:
Updated to current revision of 1-OHP-4025-R-14.

			DATE:
AUTHOR	**Name:**	John T Conrad	
	Signature:		
FACILITY REVIEWER	**Name:**		
	Signature:		
		Facility Supervisor / Manager	

REFERENCES

01-OHP-4025-R-14 Rev. 3 Restore Control Room Ventilation

TASKS

Task: 0280250104 Align ESW to the Control Room Air Conditioning Air Handling Units

K/A: APE 068 AA1.24 Ability to operate and/or monitor the Control Room re-accessibility as applied to Control Room Evacuation.

K/A IMPORTANCE: RO: 3.0 SRO 3.6

EVALUATION SETTING

In-Plant

HANDOUTS

Task Briefing
Copy of 01-OHP-4025-R-14, Restore Control Room Ventilation

ATTACHMENTS

None

SIMULATOR SETUP

None

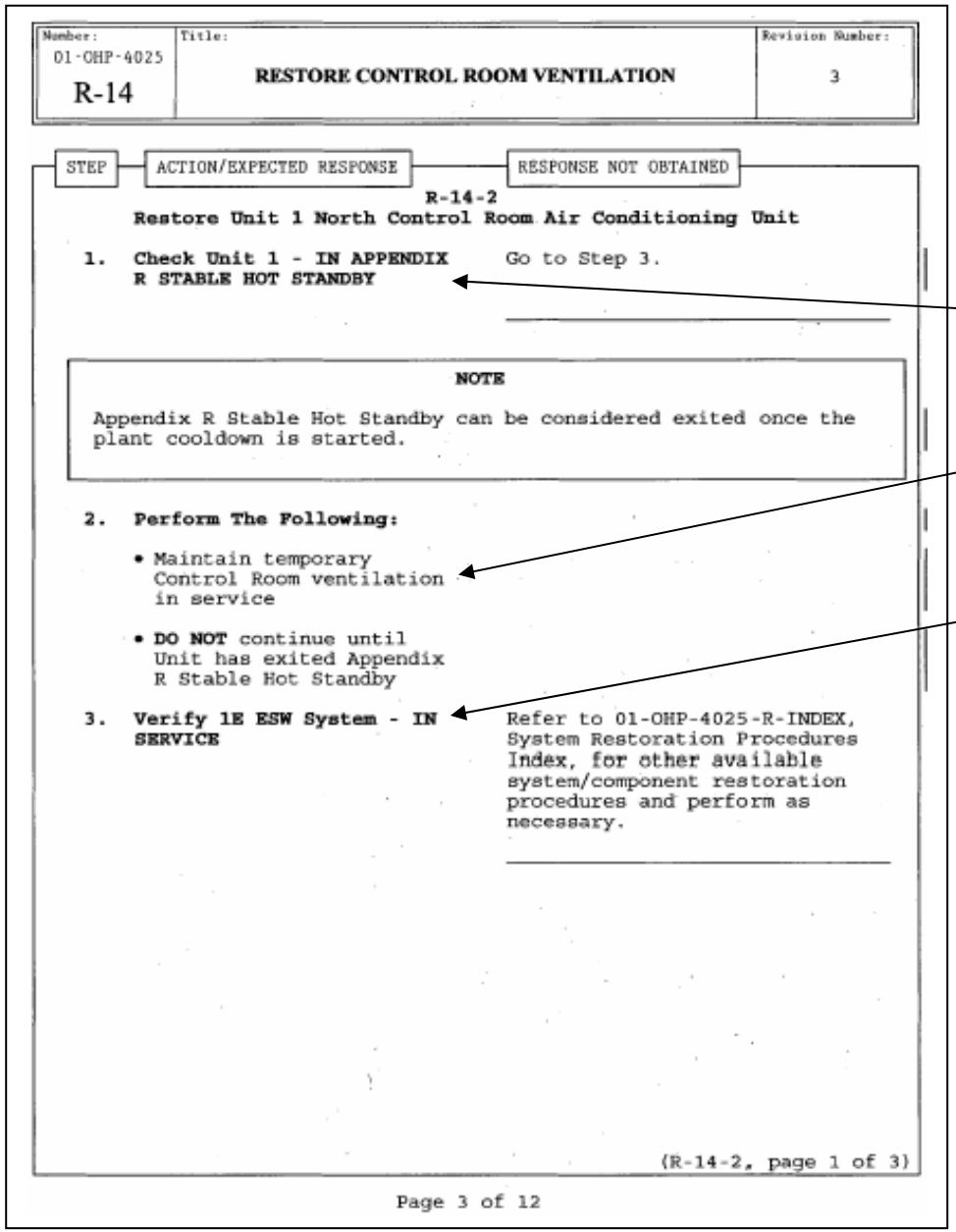
Task Objectives/Standards

The North Control Room Ventilation is Running with ESW aligned for Cooling.

Task Briefing

You are the Unit 1 RO.

A small fire in the Unit 1 Control Room Control Panel has caused the Loss of Ventilation cooling to the control room. The US has directed you to Restore the North Control Room Ventilation cooling per 01-OHP-4025-R-14, Restore Control Room Ventilation, using R-14-2, Restore Unit 1 North Control Room Air Conditioning Unit.



Number: 01-OHP-4025 R-14	Title: RESTORE CONTROL ROOM VENTILATION	Revision Number: 3

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

R-14-2

Restore Unit 1 North Control Room Air Conditioning Unit

1. **Check Unit 1 - IN APPENDIX R STABLE HOT STANDBY** — Go to Step 3.

NOTE

Appendix R Stable Hot Standby can be considered exited once the plant cooldown is started.

2. **Perform The Following:**
   - Maintain temporary Control Room ventilation in service
   - **DO NOT** continue until Unit has exited Appendix R Stable Hot Standby

3. **Verify 1E ESW System - IN SERVICE** — Refer to 01-OHP-4025-R-INDEX, System Restoration Procedures Index, for other available system/component restoration procedures and perform as necessary.

(R-14-2, page 1 of 3)

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General CUES:

1. Provide candidate copy of 01-OHP-4025-R-14 section R-14-2 (including Attachment A).
2. State all procedure prerequisites have been met.

ACTIONS:

CUE: When asked, inform candidate that RCS Cooldown in Appendix R has commenced.

CUE: If asked, inform candidate that temporary Control Room Ventilation is still in service.

CUE: Inform candidate that U1 East ESW system is in service.

Number:	Title:	Revision Number:
01-OHP-4025 R-14	RESTORE CONTROL ROOM VENTILATION	3

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

R-14-2

Restore Unit 1 North Control Room Air Conditioning Unit

4.	**Verify Power To North Control Room Air Handling Unit 1-HV-ACRA-1:** • 1-AB-D-2C	Request Maintenance to perform 01-IHP-5040-EMP-012, Control Room Air Handling Unit Fan Temporary Power. **WHEN** temporary power supply for North Control Room Air Handling Unit has been connected, **THEN** place the North Control Room Air Handling Unit in service after closing the feed breaker from the temporary power source.
5.	**Verify North Control Room Air Handling Unit 1-HV-ACRA-1 - IN SERVICE**	Return to Step 4.

CAUTION

IF CONTROL ROOM CHILLER PACKAGE IS **NOT** AVAILABLE, THE UNIT SUPERVISOR SHOULD BE INFORMED PRIOR TO IMPLEMENTATION OF R-14, Restore Control Room Ventilation, R-14-2, Attachment A: Emergency ESW Flow Through North Control Room AHU.

6.	**Verify North Control Room Chiller Package - IN SERVICE:** • Chiller Compressor • Chilled Water Pump	Initiate Emergency ESW through the North Control Room Air Handling Unit by performing 01-OHP-4025-R-14, Restore Control Room Ventilation, R-14-2, Attachment A: Emergency ESW Flow Through North Control Room AHU.

(R-14-2, page 2 of 3)

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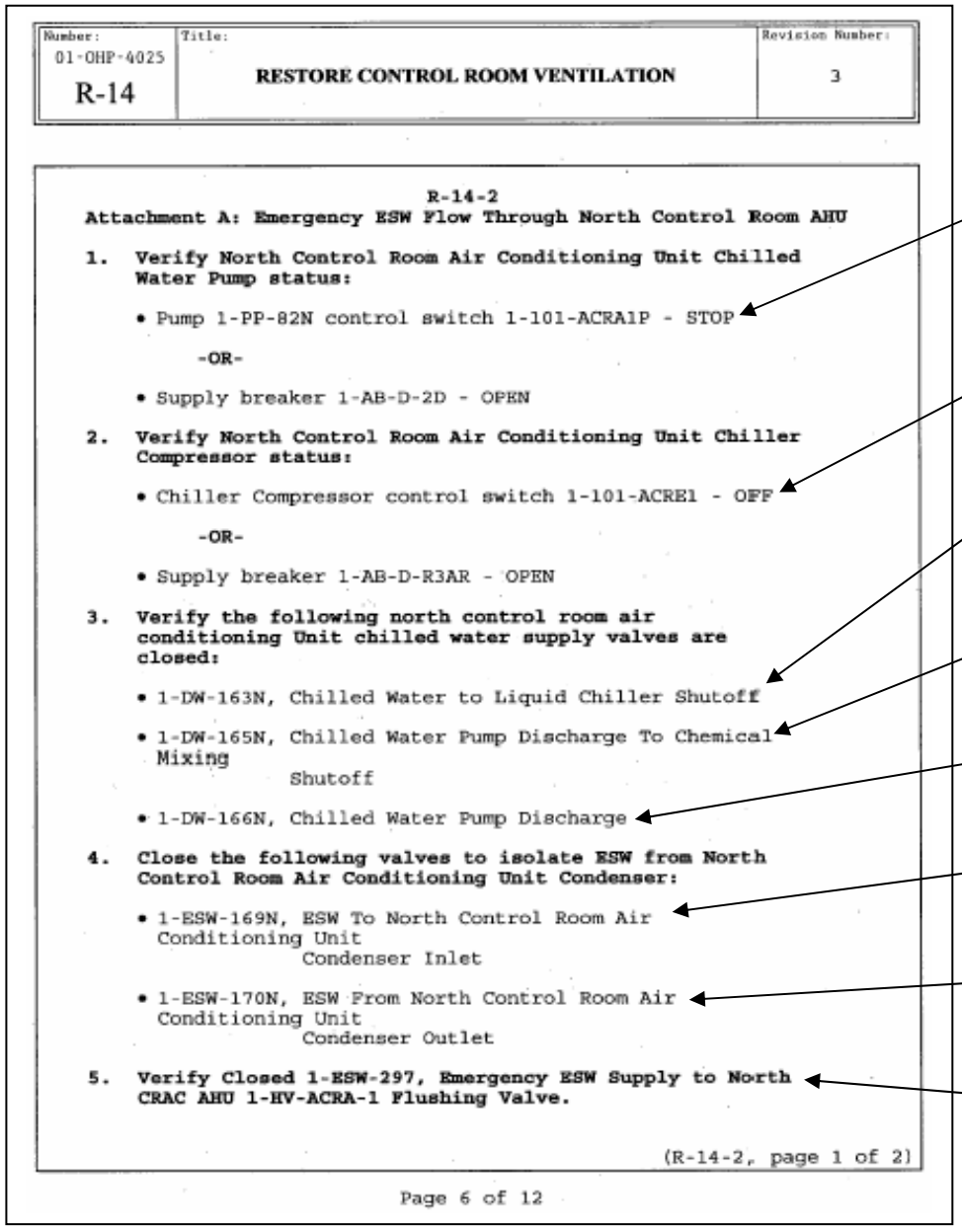
CUE: Inform candidate that 01-IHP-5040-EMP-012, Control Room Unit 1-HV-ACRA-1, Air Handling Unit Fan Temporary Power, is complete and the feed breaker from the temporary power source is closed. The RED (power) light is LIT on the local sub panel.

CUE: Inform candidate that 1-HV-ACRA-1 is in service.

CUE: Inform candidate that **NEITHER** the North Control Room Chiller Package Chiller Compressor **NOR** the Chilled Water Pump is in service.



Number: 01-OHP-4025 R-14	Title: RESTORE CONTROL ROOM VENTILATION	Revision Number: 3

R-14-2
Attachment A: Emergency ESW Flow Through North Control Room AHU

1. Verify North Control Room Air Conditioning Unit Chilled Water Pump status:

- Pump 1-PP-82N control switch 1-101-ACRA1P - STOP

-OR-

- Supply breaker 1-AB-D-2D - OPEN

2. Verify North Control Room Air Conditioning Unit Chiller Compressor status:

- Chiller Compressor control switch 1-101-ACRE1 - OFF

-OR-

- Supply breaker 1-AB-D-R3AR - OPEN

3. Verify the following north control room air conditioning Unit chilled water supply valves are closed:

- 1-DW-163N, Chilled Water to Liquid Chiller Shutoff
- 1-DW-165N, Chilled Water Pump Discharge To Chemical Mixing Shutoff
- 1-DW-166N, Chilled Water Pump Discharge

4. Close the following valves to isolate ESW from North Control Room Air Conditioning Unit Condenser:

- 1-ESW-169N, ESW To North Control Room Air Conditioning Unit Condenser Inlet
- 1-ESW-170N, ESW From North Control Room Air Conditioning Unit Condenser Outlet

5. Verify Closed 1-ESW-297, Emergency ESW Supply to North CRAC AHU 1-HV-ACRA-1 Flushing Valve.

(R-14-2, page 1 of 2)

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NOTE: Butterfly half-turn valves have locking nuts that need to be loosened prior to valve movement.

Place 1-PP-82N Control Switch in "**STOP**" position
CUE: Switch is in the "STOP" position

Place Compressor Control Switch in "**OFF**" position

CUE: Switch is in the "OFF" position

CT: Place valve **1DW-163N** in the CLOSED position

CUE: You feel movement, Movement has stopped.

Verify valve**1DW-165N** in the CLOSED position

CUE: As found (Stem inserted)

CT: Place valve **1DW-166N** in the CLOSED position

CUE: You feel movement, Movement has stopped.

CT: Place valve **1ESW-169N** in the CLOSED position

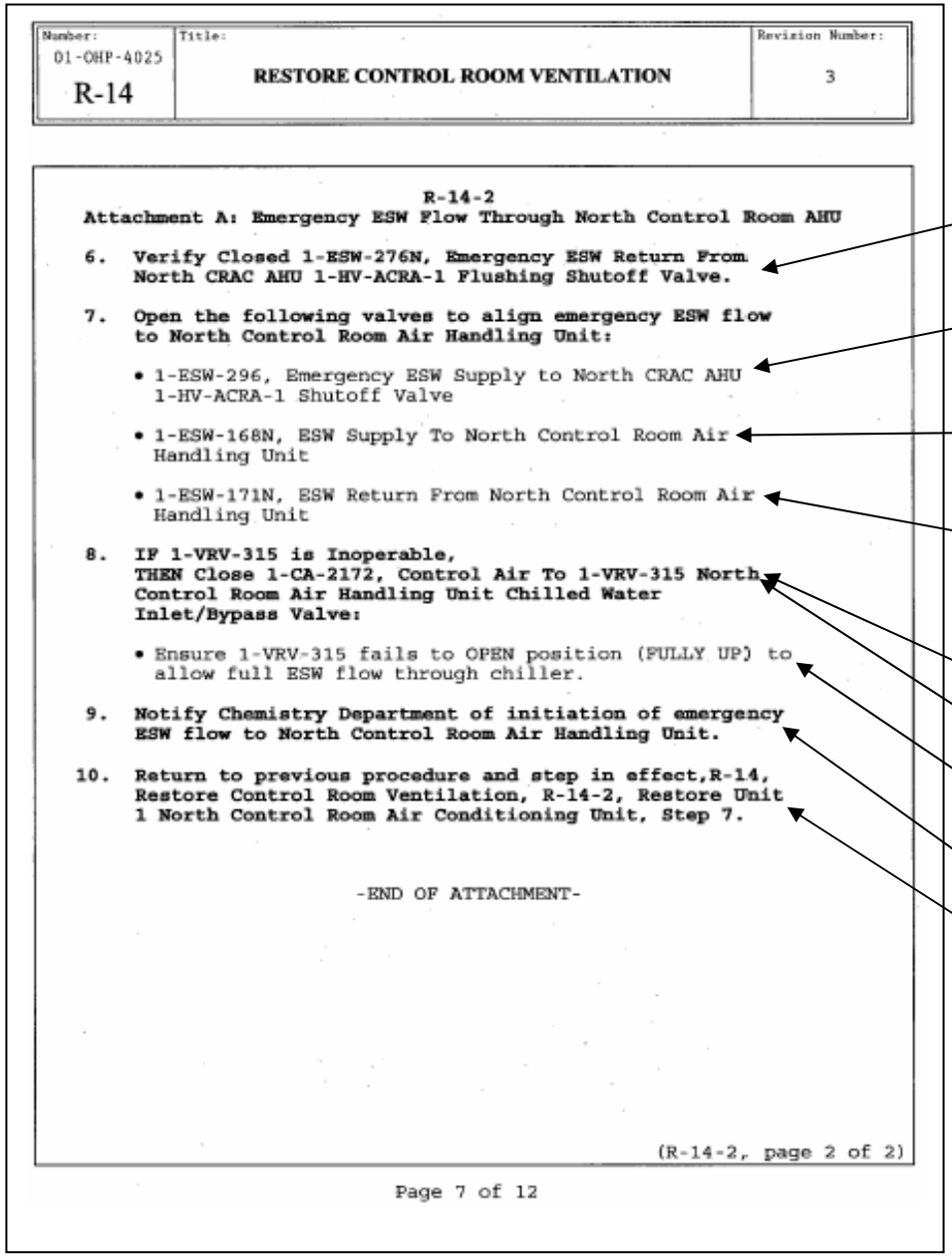
CUE: You feel movement, Movement has stopped.

CT: Place valve **1ESW-170N** in the CLOSED position

CUE: You feel movement, Movement has stopped.

Verify valve**1ESW-297** is in the CLOSED position

CUE: If valve is open, you feel movement, Movement has stopped.



Number:	Title:	Revision Number:
01-OHP-4025 R-14	RESTORE CONTROL ROOM VENTILATION	3

R-14-2
Attachment A: Emergency ESW Flow Through North Control Room AHU

6. **Verify Closed 1-ESW-276N, Emergency ESW Return From North CRAC AHU 1-HV-ACRA-1 Flushing Shutoff Valve.**

7. **Open the following valves to align emergency ESW flow to North Control Room Air Handling Unit:**
   - 1-ESW-296, Emergency ESW Supply to North CRAC AHU 1-HV-ACRA-1 Shutoff Valve
   - 1-ESW-168N, ESW Supply To North Control Room Air Handling Unit
   - 1-ESW-171N, ESW Return From North Control Room Air Handling Unit

8. **IF 1-VRV-315 is Inoperable, THEN Close 1-CA-2172, Control Air To 1-VRV-315 North Control Room Air Handling Unit Chilled Water Inlet/Bypass Valve:**
   - Ensure 1-VRV-315 fails to OPEN position (FULLY UP) to allow full ESW flow through chiller.

9. **Notify Chemistry Department of initiation of emergency ESW flow to North Control Room Air Handling Unit.**

10. **Return to previous procedure and step in effect,R-14, Restore Control Room Ventilation, R-14-2, Restore Unit 1 North Control Room Air Conditioning Unit, Step 7.**

-END OF ATTACHMENT-

(R-14-2, page 2 of 2)

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Verify valve **1ESW-276N** is in the CLOSED position

CUE: As found (Stem inserted)

CT: Place valve **1-ESW-296** in the OPEN position

CUE: You feel movement, you feel resistance.

CT: Place valve **1-ESW-168N** in the OPEN position

CUE: You feel movement, you feel resistance.

CT: Place valve **1-ESW-171N** in the OPEN position

CUE: You feel movement, you feel resistance. You hear flow noise & feel vibration in piping

CUE: Inform operator that VRV-315 is INOPERABLE.

CT: Operator closes 1-CA-2172.

CUE: Inlet/Bypass valve's (1-VRV-315) stem indicates "FULLY UP"

CUE: Chemistry Department acknowledges task.

CUE: Acknowledge report that ESW flow initiated to North Control Room Air Handling Unit.

Evaluator: **"JPM IS COMPLETE"**

Task Briefing

You are the Unit 1 RO.

A small fire in the Unit 1 Control Room Control Panel has caused the Loss of Ventilation cooling to the control room. The US has directed you to Restore the North Control Room Ventilation cooling per 01-OHP-4025-R-14, Restore Control Room Ventilation, using R-14-2, Restore Unit 1 North Control Room Air Conditioning Unit.

NRC2007-Inp02

TITLE	**S/G 2/3 Level Control through AFW Unit Crosstie**	**REVISION**	**0**
PROGRAM	**Initial Licensed Operator (ILT)**	**TIME**	**15 Minutes**

SCOPE OF REVISION:

Initial Issue

			DATE:
AUTHOR	**Name:**	John T Conrad	
	Signature:		
FACILITY REVIEWER	**Name:**		
	Signature:		
		Facility Supervisor / Manager	

REFERENCES

02-OHP-4025-LS-3-1 Steam Generator 2/3 Level Control

TASK

TASK ID: 05600290604, Establish Local Control of AFW to Maintain SG Level.
K/A Statement: APE 054 AA1.01 /
K/A Importance: RO: 4.5 SRO: 4.4

EVALUATION SETTING

Turbine Building, 4kV Room
Aux Building 591' Elevation

HANDOUTS

02-OHP-4025-LS-3 Steam Generator 2/3 Level Control

ATTACHMENTS

None

SIMULATOR SETUP

None

COURSE NUMBER AND TITLE:	NRC2007-Inp02 SG 2/3 Level Control through AFW Unit Crosstie	REVISION: 0

TASK OBJECTIVES/STANDARDS

Perform SG 2/3 level control operations locally in response to an Appendix R event forcing control room evacuation.

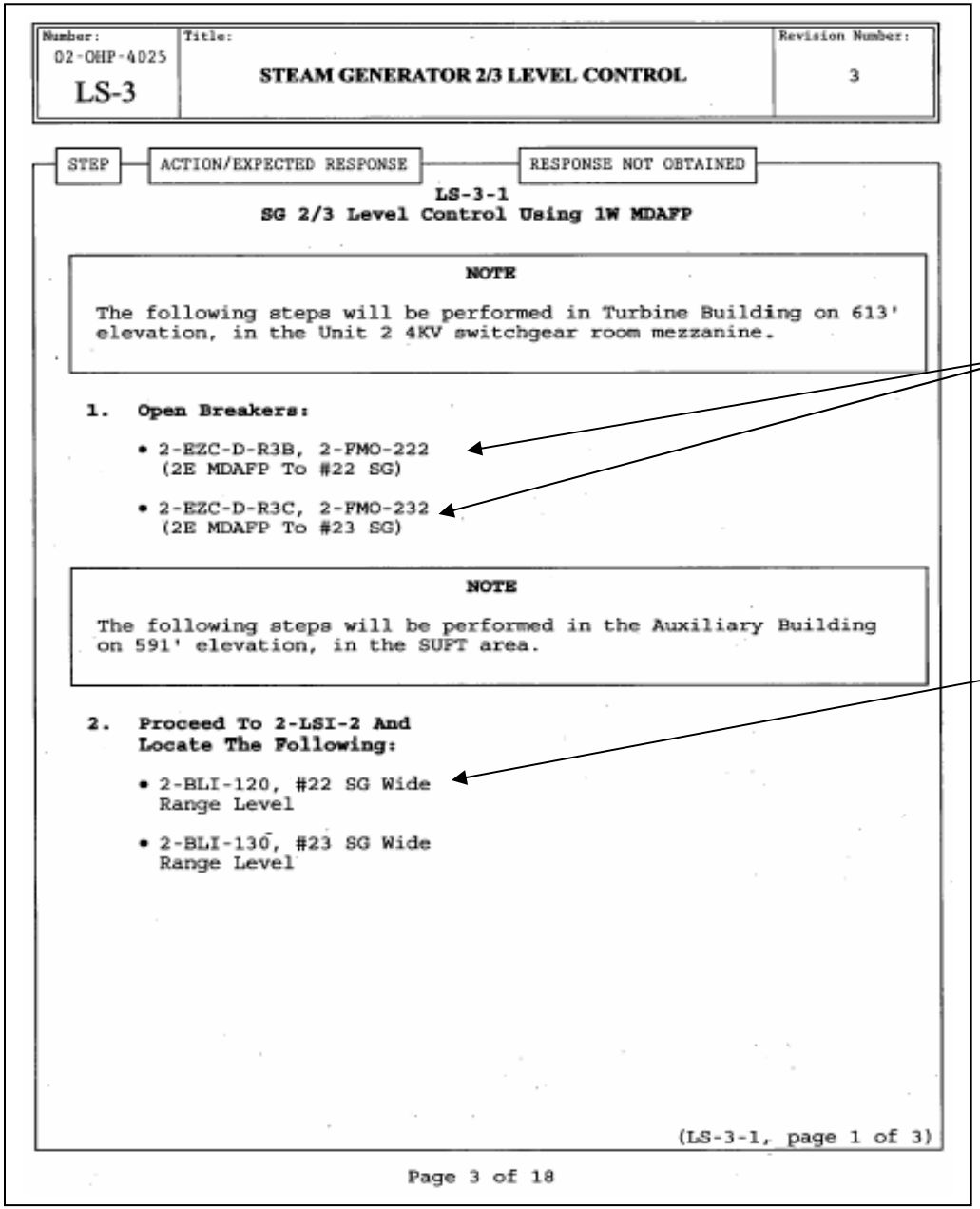
EVALUATOR INSTRUCTIONS

Provide the operator with a of 02-OHP-4025-LS-3, Steam Generator 2/3 Level Control

TASK BREIFING

You are an RO on Unit 2

Unit 2 has experience an Appendix R Fire event and is in the process of establishing local control. The Unit Supervisor has requested that you perform 02-OHP-4025-LS-3-1, Steam Generator 2/3 Level Control, to align the 2W MDAFP to Unit 1 SG 2/3.



Number:	Title:	Revision Number:
02-OHP-4025 LS-3	STEAM GENERATOR 2/3 LEVEL CONTROL	3

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

LS-3-1
SG 2/3 Level Control Using 1W MDAFP

NOTE

The following steps will be performed in Turbine Building on 613' elevation, in the Unit 2 4KV switchgear room mezzanine.

1. **Open Breakers:**
   - 2-EZC-D-R3B, 2-FMO-222 (2E MDAFP To #22 SG)
   - 2-EZC-D-R3C, 2-FMO-232 (2E MDAFP To #23 SG)

NOTE

The following steps will be performed in the Auxiliary Building on 591' elevation, in the SUFT area.

2. **Proceed To 2-LSI-2 And Locate The Following:**
   - 2-BLI-120, #22 SG Wide Range Level
   - 2-BLI-130, #23 SG Wide Range Level

(LS-3-1, page 1 of 3)

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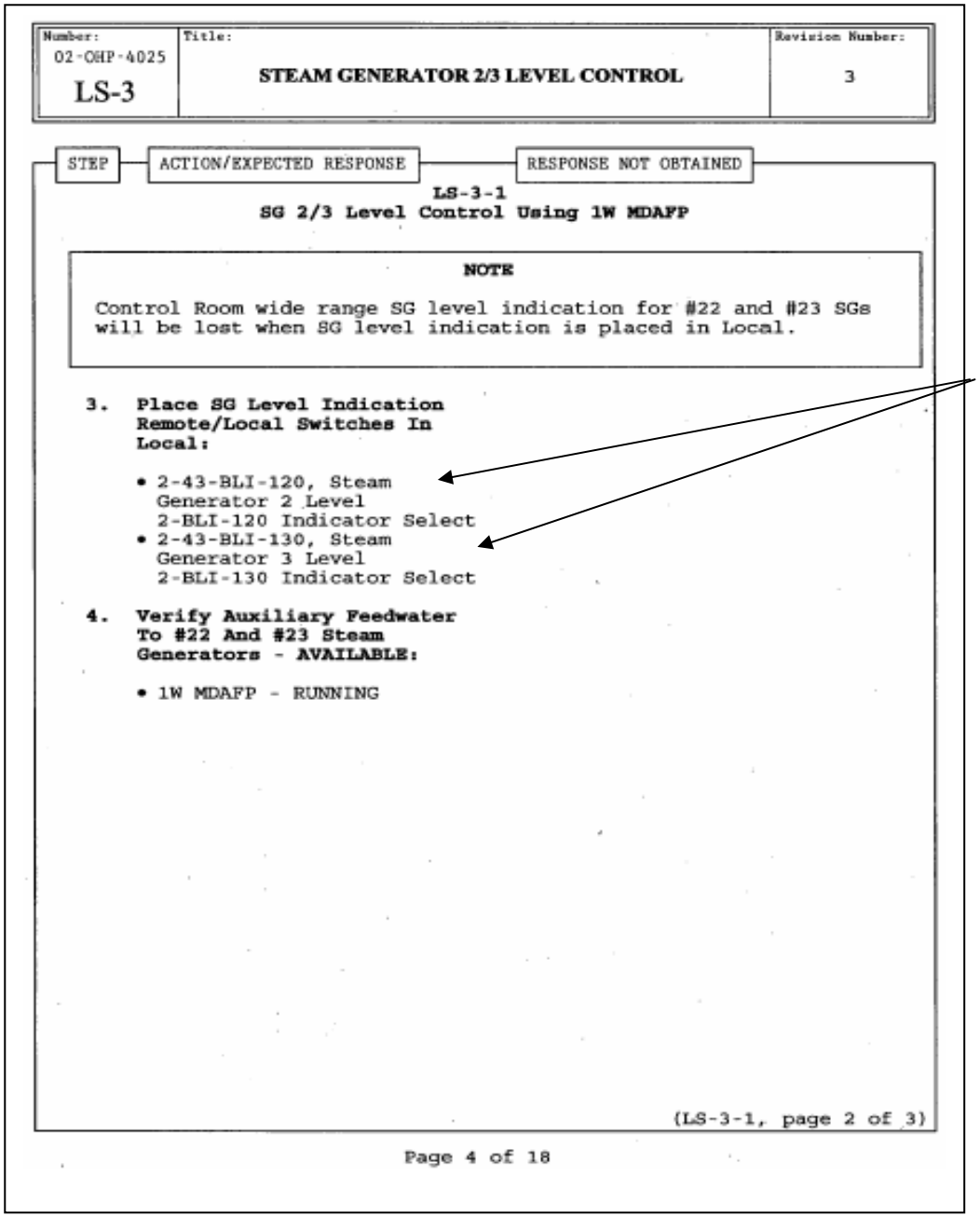
Evaluator Note: If this JPM is started in the Aux Building, then the operator may locate and describe operation of the 2-FMO-222 and 2-FMO-232 breakers once leaving the Aux Building.

CT: The operator locates and simulates opening the supply breakers for 2-FMO-222 and 2-FMO-232.

NOTE: If operator attempts to open cubicle door to internal breaker, inform operator that internal breaker is OPEN.

CUE: Supply breakers for 2-FMO-222 and 2-FMO-232 are both OPEN.

The operator locates indications on 2-LSI-2.



Number: 02-OHP-4025 LS-3	Title: STEAM GENERATOR 2/3 LEVEL CONTROL	Revision Number: 3

STEP | ACTION/EXPECTED RESPONSE | RESPONSE NOT OBTAINED

LS-3-1
SG 2/3 Level Control Using 1W MDAFP

NOTE

Control Room wide range SG level indication for #22 and #23 SGs will be lost when SG level indication is placed in Local.

3. **Place SG Level Indication Remote/Local Switches In Local:**

   - 2-43-BLI-120, Steam Generator 2 Level 2-BLI-120 Indicator Select
   - 2-43-BLI-130, Steam Generator 3 Level 2-BLI-130 Indicator Select

4. **Verify Auxiliary Feedwater To #22 And #23 Steam Generators - AVAILABLE:**

   - 1W MDAFP - RUNNING

(LS-3-1, page 2 of 3)

Page 4 of 18

CT: The operator places the switches for BLI-120 and BLI-130 to the LOCAL position. Level indication rises on gauge to approximately 60% WR level.

CUE: The 1W MDAFP is running and with manual crosstie to Unit 2 open.

Number:	Title:	Revision Number:
02-OHP-4025 LS-3	STEAM GENERATOR 2/3 LEVEL CONTROL	3

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

LS-3-1
SG 2/3 Level Control Using 1W MDAFP

NOTE

Auxiliary feedwater flowrate will depend on steam generator steaming rate and RCS cooldown rate.

5. **Maintain #22 And #23 Steam Generators Levels - 50% TO 55%:**

   - Locally operate auxiliary feedwater flow control valves using handwheels:
     - 2-FMO-222, 2E/1W MDAFP To #22 SG
     - 2-FMO-232, 2E/1W MDAFP To #23 SG
   - Monitor the following at 2-LSI-2:
     - 2-BLI-120, #22 SG Wide Range Level
     - 2-BLI-130, #23 SG Wide Range Level

6. **Report 02-OHP-4025-LS-3, Steam Generator 2/3 Level Control, LS-3-1, SG 2/3 Level Control Using 1W MDAFP, Complete Upon Initiating Auxiliary Feedwater Flow To #22 And #23 Steam Generators**

7. **Stand By For Further Instructions**

-END OF ATTACHMENT-

(LS-3-1, page 3 of 3)

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CT: The operator locates and simulates manual operation of 2-FMO-222 and 2-FMO-232.

CUE: Operator hears flow noise through Aux Feedwater piping as FMOs are operated

The operator locates monitors SG WR level on 2-LSI-2

The operator reports task is complete.

THIS JPM IS COMPLETE

Task Briefing

You are an RO on Unit 2

Unit 2 has experience an Appendix R Fire event and is in the process of establishing local control. The Unit Supervisor has requested that you perform 02-OHP-4025-LS-3-1, Steam Generator 2/3 Level Control, to feed Unit 2 SG 2/3 using the 1W MDAFP.

The 1 W MDAFP has been aligned with the crosstie (2-FW-127) open.

NRC2007-Inp03

TITLE	**Perform Local RCS Isolation on Unit 2 (ALT)**	**REVISION**	**0**
PROGRAM	**Initial Licensed Operator (ILT)**	**TIME**	**20 Minutes**

SCOPE OF REVISION:

Initial Issue: Derived from Audit04-Inp02.

			DATE:
AUTHOR	**Name:**	John T Conrad	
	Signature:		
FACILITY REVIEWER	**Name:**		
	Signature:		
		Facility Supervisor / Manager	

REFERENCES

Procedure: 02-OHP 4025.LTI-5, Isolation of RCS and SGBD

TASK

Task ID: 0021190601, Isolate the RCS for an Emergency Remote Shutdown

K/A Statement: APE 068 AK3.18
K/A Importance: RO: 4.2 SRO: 4.5

K/A Statement: SYS 002 K1.04
K/A Importance: RO: 2.8 SRO: 3.2

K/A Statement: SYS 002 K6.04
K/A Importance: RO: 2.5 SRO: 2.9

K/A Statement: SYS 002 A2.01 4.3/4.4)
K/A Importance: RO: 4.3 SRO: 4.4

EVALUATION SETTING

U-2 4KV Room.

HANDOUTS

Task Briefing
02-OHP 4025.LTI-5, LTI-5-1

ATTACHMENTS

None

SIMULATOR SETUP

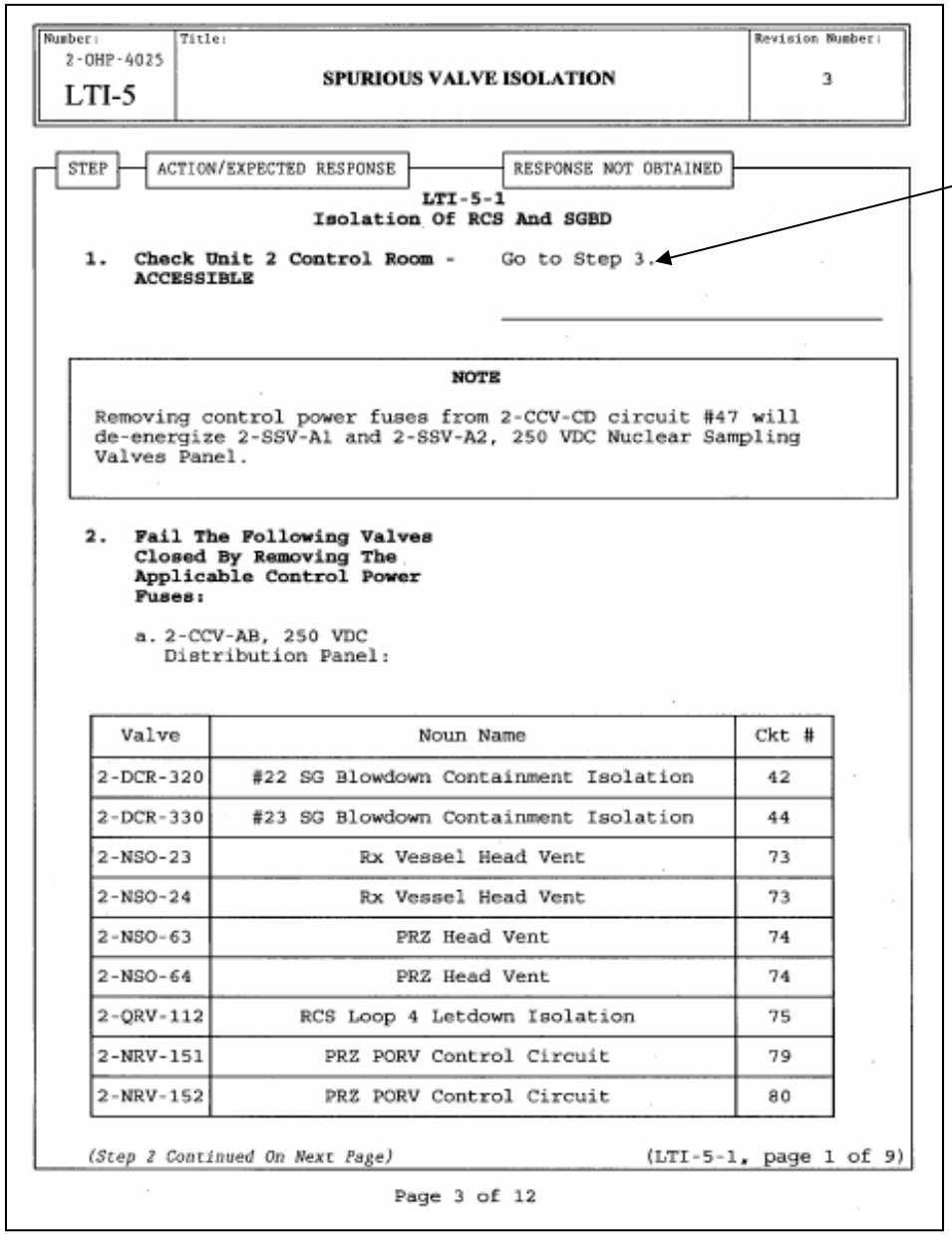
None

TASK OBJECTIVES/STANDARDS

The U2 RCS has been isolated in accordance with 2-OHP-4025-LTI-5-1.

TASK BRIEFING

The Shift Manager (SM) has implemented 02-OHP-4025.001.001, Emergency Remote Shutdown procedure. The Unit 2 control room has been evacuated and is NOT accessible. The SM directs you to perform local RCS and SGBD isolation in accordance with Section LTI-5-1 of 02-OHP 4025.LTI-5.



Number:	Title:	Revision Number:
2-OHP-4025 LTI-5	SPURIOUS VALVE ISOLATION	3

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

LTI-5-1
Isolation Of RCS And SGBD

1. **Check Unit 2 Control Room - ACCESSIBLE** — Go to Step 3.

NOTE

Removing control power fuses from 2-CCV-CD circuit #47 will de-energize 2-SSV-A1 and 2-SSV-A2, 250 VDC Nuclear Sampling Valves Panel.

2. **Fail The Following Valves Closed By Removing The Applicable Control Power Fuses:**

   a. 2-CCV-AB, 250 VDC Distribution Panel:

Valve	Noun Name	Ckt #
2-DCR-320	#22 SG Blowdown Containment Isolation	42
2-DCR-330	#23 SG Blowdown Containment Isolation	44
2-NSO-23	Rx Vessel Head Vent	73
2-NSO-24	Rx Vessel Head Vent	73
2-NSO-63	PRZ Head Vent	74
2-NSO-64	PRZ Head Vent	74
2-QRV-112	RCS Loop 4 Letdown Isolation	75
2-NRV-151	PRZ PORV Control Circuit	79
2-NRV-152	PRZ PORV Control Circuit	80

(Step 2 Continued On Next Page) (LTI-5-1, page 1 of 9)

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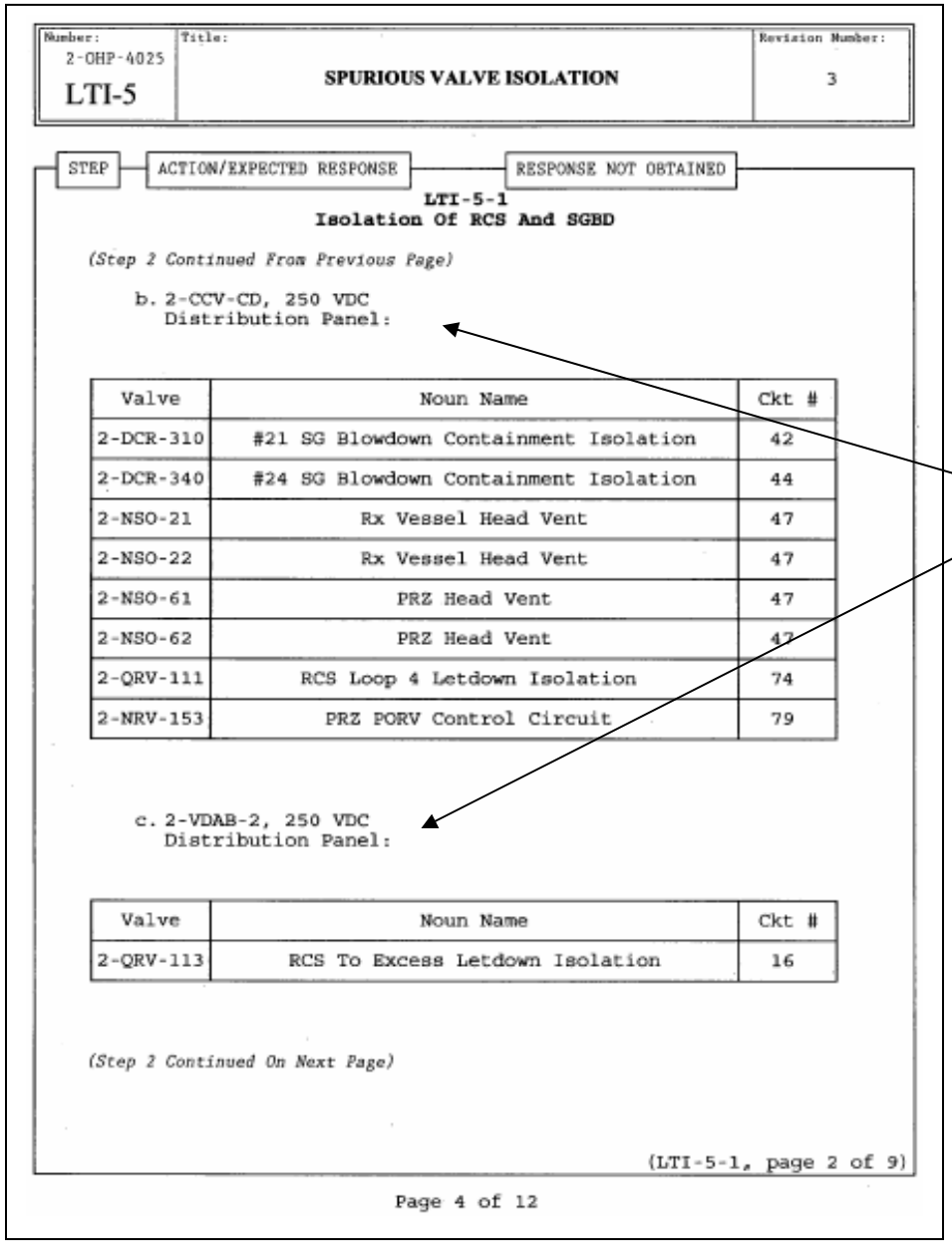
Operator must go to step 3 due to Control Room being unavailable.



Number:	Title:	Revision Number:
2-OHP-4025 LTI-5	SPURIOUS VALVE ISOLATION	3

STEP | ACTION/EXPECTED RESPONSE | RESPONSE NOT OBTAINED

LTI-5-1
Isolation Of RCS And SGBD

(Step 2 Continued From Previous Page)

b. 2-CCV-CD, 250 VDC Distribution Panel:

Valve	Noun Name	Ckt #
2-DCR-310	#21 SG Blowdown Containment Isolation	42
2-DCR-340	#24 SG Blowdown Containment Isolation	44
2-NSO-21	Rx Vessel Head Vent	47
2-NSO-22	Rx Vessel Head Vent	47
2-NSO-61	PRZ Head Vent	47
2-NSO-62	PRZ Head Vent	47
2-QRV-111	RCS Loop 4 Letdown Isolation	74
2-NRV-153	PRZ PORV Control Circuit	79

c. 2-VDAB-2, 250 VDC Distribution Panel:

Valve	Noun Name	Ckt #
2-QRV-113	RCS To Excess Letdown Isolation	16

(Step 2 Continued On Next Page)

(LTI-5-1, page 2 of 9)

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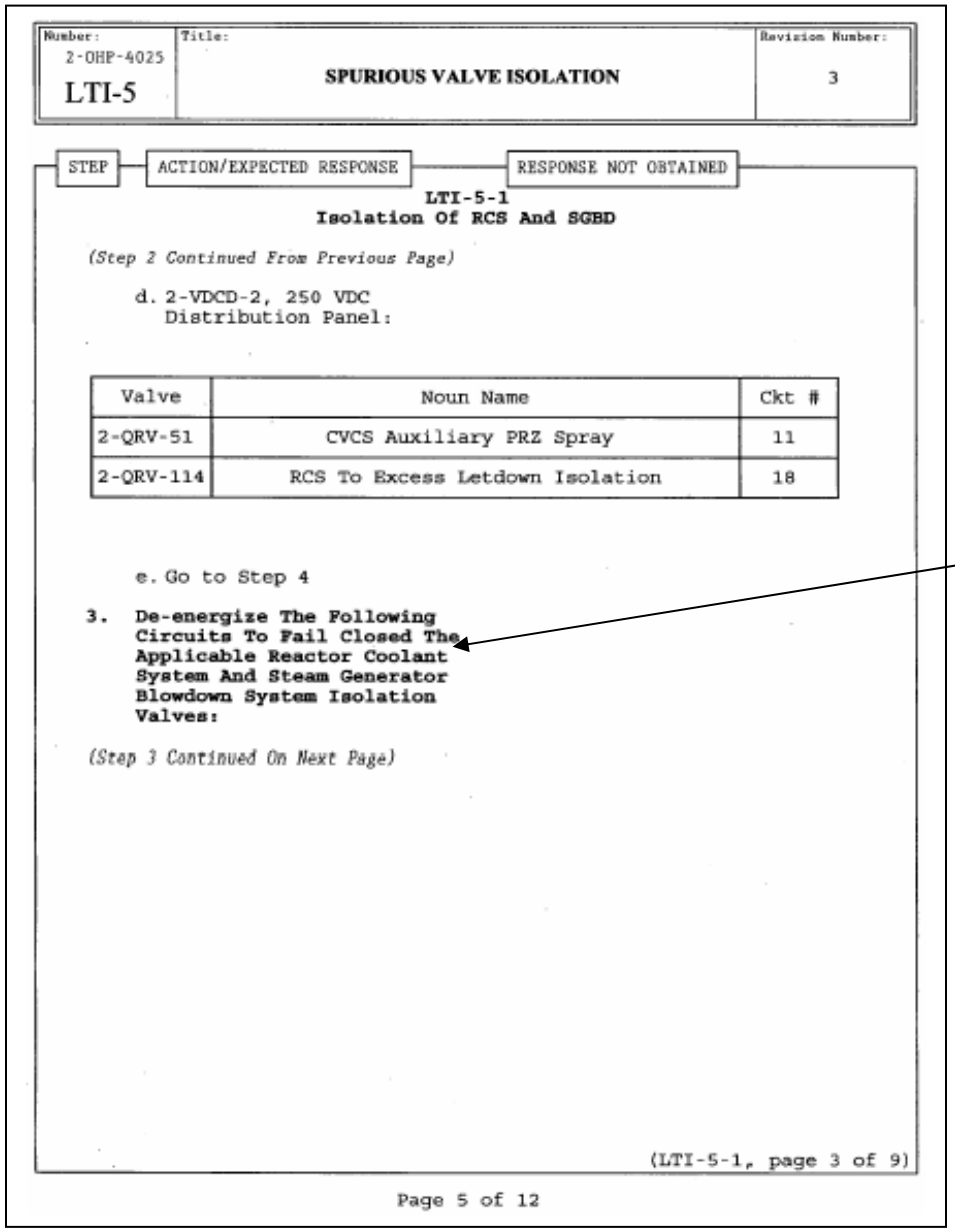
Continued:

Operator must go to step 3 due to Control Room being unavailable.



Number: 2-OHP-4025 LTI-5	Title: SPURIOUS VALVE ISOLATION	Revision Number: 3

STEP | ACTION/EXPECTED RESPONSE | RESPONSE NOT OBTAINED

LTI-5-1
Isolation Of RCS And SGBD

(Step 2 Continued From Previous Page)

d. 2-VDCD-2, 250 VDC Distribution Panel:

Valve	Noun Name	Ckt #
2-QRV-51	CVCS Auxiliary PRZ Spray	11
2-QRV-114	RCS To Excess Letdown Isolation	18

e. Go to Step 4

3. De-energize The Following Circuits To Fail Closed The Applicable Reactor Coolant System And Steam Generator Blowdown System Isolation Valves:

(Step 3 Continued On Next Page)

(LTI-5-1, page 3 of 9)

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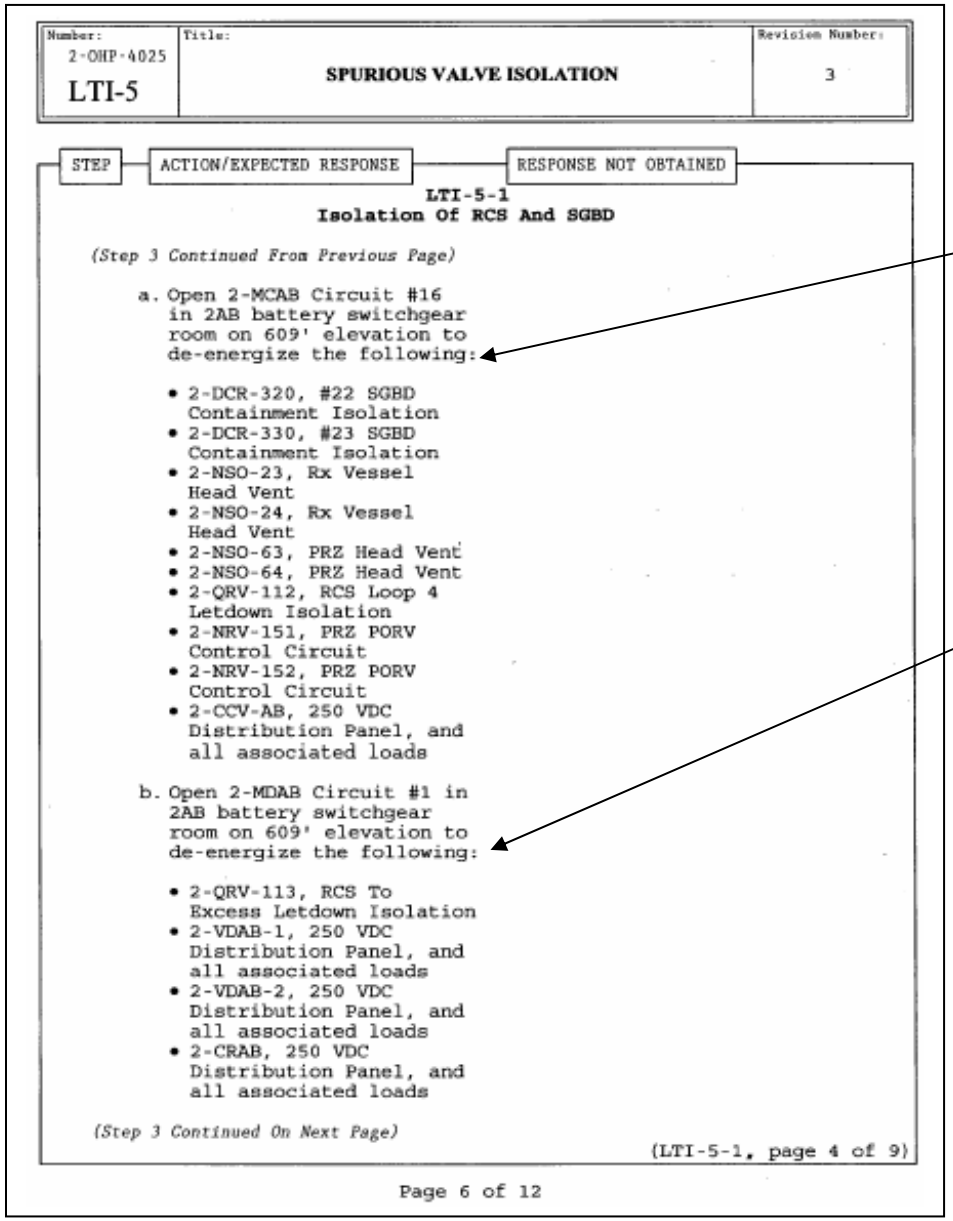
Operator implements step 3 with Control Room unavailable.



Number:	Title:	Revision Number:
2-OHP-4025 LTI-5	SPURIOUS VALVE ISOLATION	3

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

LTI-5-1
Isolation Of RCS And SGBD

(Step 3 Continued From Previous Page)

a. Open 2-MCAB Circuit #16 in 2AB battery switchgear room on 609' elevation to de-energize the following:

- 2-DCR-320, #22 SGBD Containment Isolation
- 2-DCR-330, #23 SGBD Containment Isolation
- 2-NSO-23, Rx Vessel Head Vent
- 2-NSO-24, Rx Vessel Head Vent
- 2-NSO-63, PRZ Head Vent
- 2-NSO-64, PRZ Head Vent
- 2-QRV-112, RCS Loop 4 Letdown Isolation
- 2-NRV-151, PRZ PORV Control Circuit
- 2-NRV-152, PRZ PORV Control Circuit
- 2-CCV-AB, 250 VDC Distribution Panel, and all associated loads

b. Open 2-MDAB Circuit #1 in 2AB battery switchgear room on 609' elevation to de-energize the following:

- 2-QRV-113, RCS To Excess Letdown Isolation
- 2-VDAB-1, 250 VDC Distribution Panel, and all associated loads
- 2-VDAB-2, 250 VDC Distribution Panel, and all associated loads
- 2-CRAB, 250 VDC Distribution Panel, and all associated loads

(Step 3 Continued On Next Page)

(LTI-5-1, page 4 of 9)

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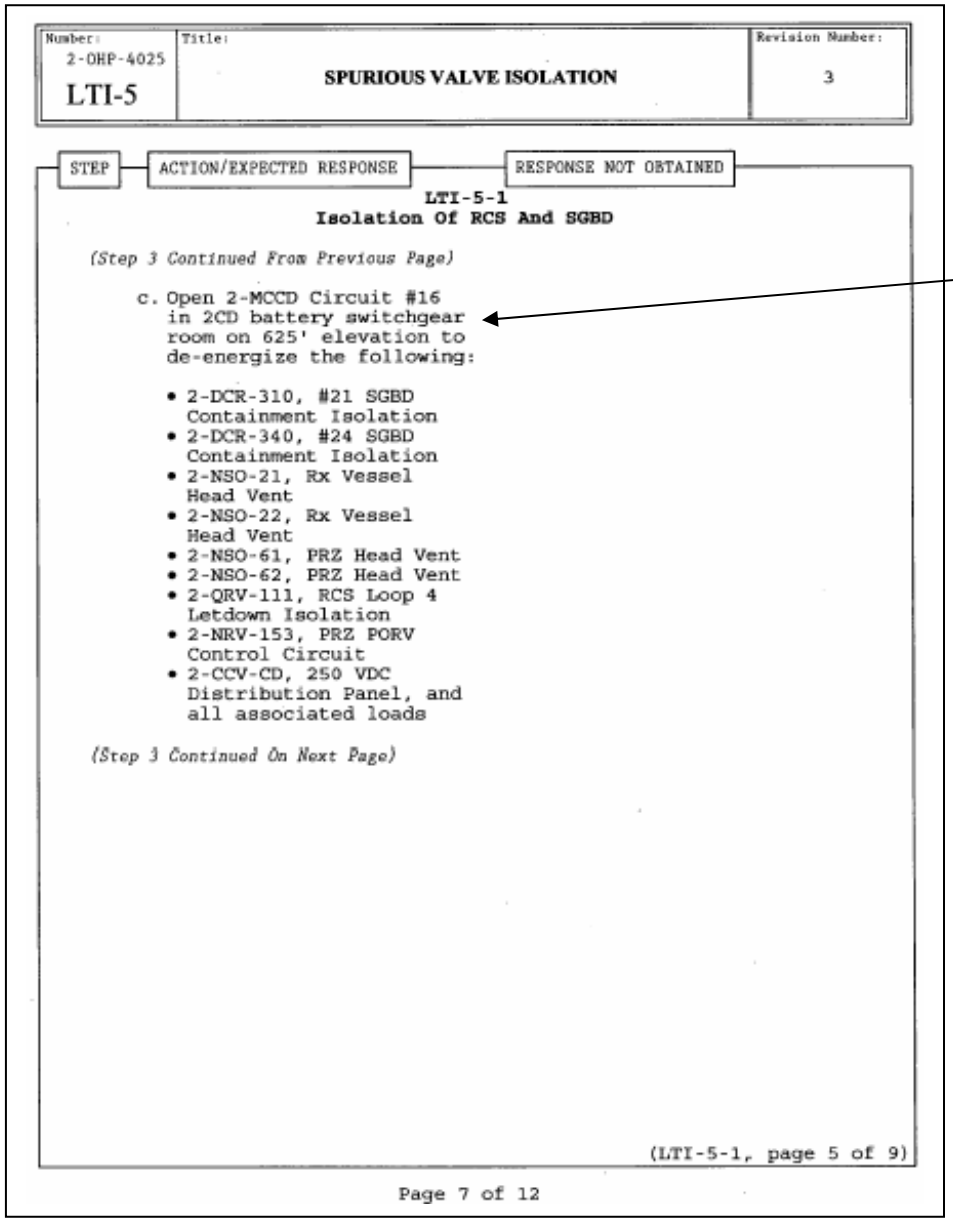
CT: Operator opens 2-MCAB circuit #16 breaker.

Cue: Breaker is in the OFF position.

CT: Operator opens 2-MDAB circuit #1 breaker.

Cue: Breaker is in the OFF position.



Number:	Title:	Revision Number:
2-OHP-4025 LTI-5	SPURIOUS VALVE ISOLATION	3

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

LTI-5-1
Isolation Of RCS And SGBD

(Step 3 Continued From Previous Page)

c. Open 2-MCCD Circuit #16 in 2CD battery switchgear room on 625' elevation to de-energize the following:

- 2-DCR-310, #21 SGBD Containment Isolation
- 2-DCR-340, #24 SGBD Containment Isolation
- 2-NSO-21, Rx Vessel Head Vent
- 2-NSO-22, Rx Vessel Head Vent
- 2-NSO-61, PRZ Head Vent
- 2-NSO-62, PRZ Head Vent
- 2-QRV-111, RCS Loop 4 Letdown Isolation
- 2-NRV-153, PRZ PORV Control Circuit
- 2-CCV-CD, 250 VDC Distribution Panel, and all associated loads

(Step 3 Continued On Next Page)

(LTI-5-1, page 5 of 9)

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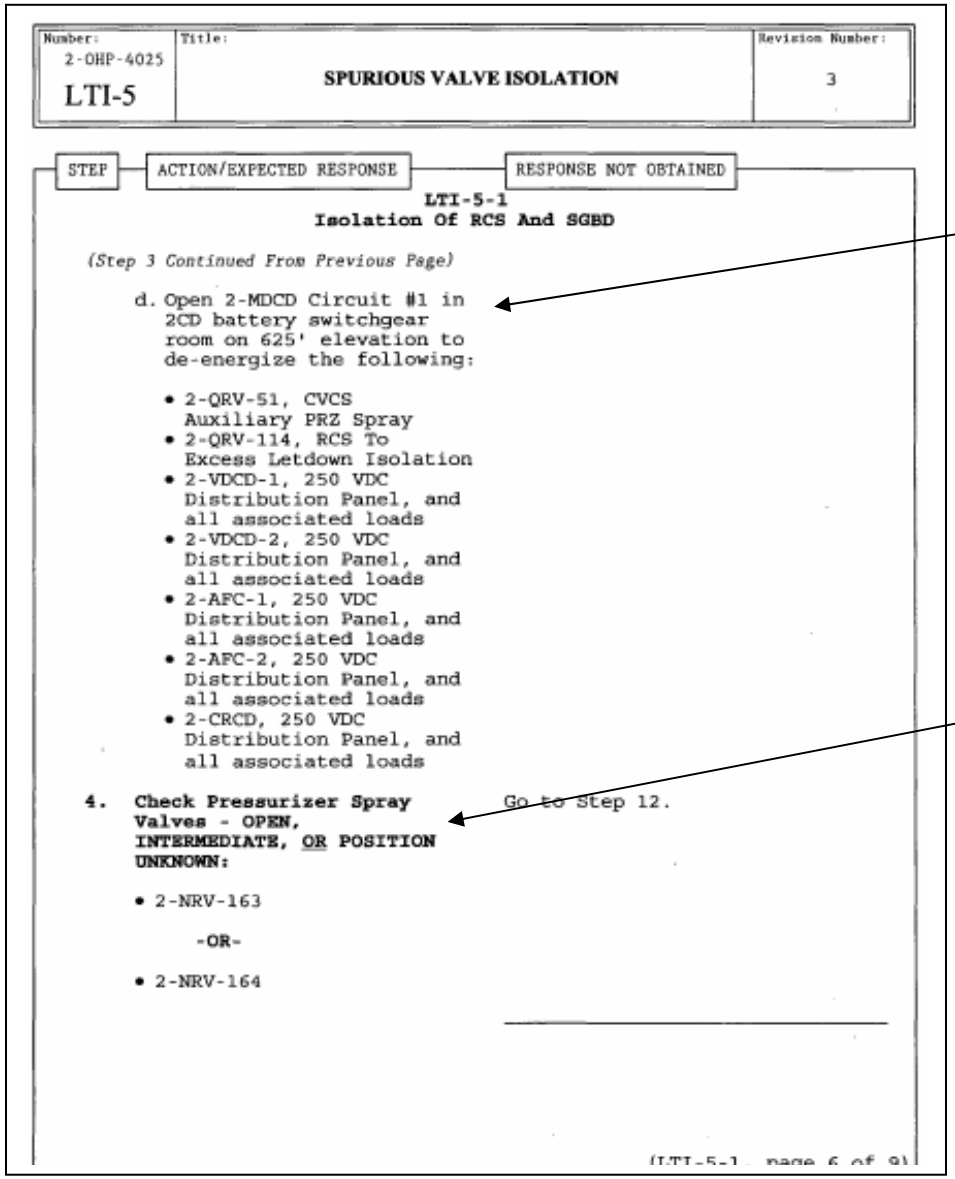
CT: Operator simulates opening 2-MCCD circuit #16 breaker.

Cue: Breaker is in the OFF position.



Number:	Title:	Revision Number:
2-OHP-4025 LTI-5	SPURIOUS VALVE ISOLATION	3

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

LTI-5-1
Isolation Of RCS And SGBD

(Step 3 Continued From Previous Page)

d. Open 2-MDCD Circuit #1 in 2CD battery switchgear room on 625' elevation to de-energize the following:

- 2-QRV-51, CVCS Auxiliary PRZ Spray
- 2-QRV-114, RCS To Excess Letdown Isolation
- 2-VDCD-1, 250 VDC Distribution Panel, and all associated loads
- 2-VDCD-2, 250 VDC Distribution Panel, and all associated loads
- 2-AFC-1, 250 VDC Distribution Panel, and all associated loads
- 2-AFC-2, 250 VDC Distribution Panel, and all associated loads
- 2-CRCD, 250 VDC Distribution Panel, and all associated loads

4. **Check Pressurizer Spray Valves - OPEN, INTERMEDIATE, OR POSITION UNKNOWN:** Go to Step 12.

- 2-NRV-163

-OR-

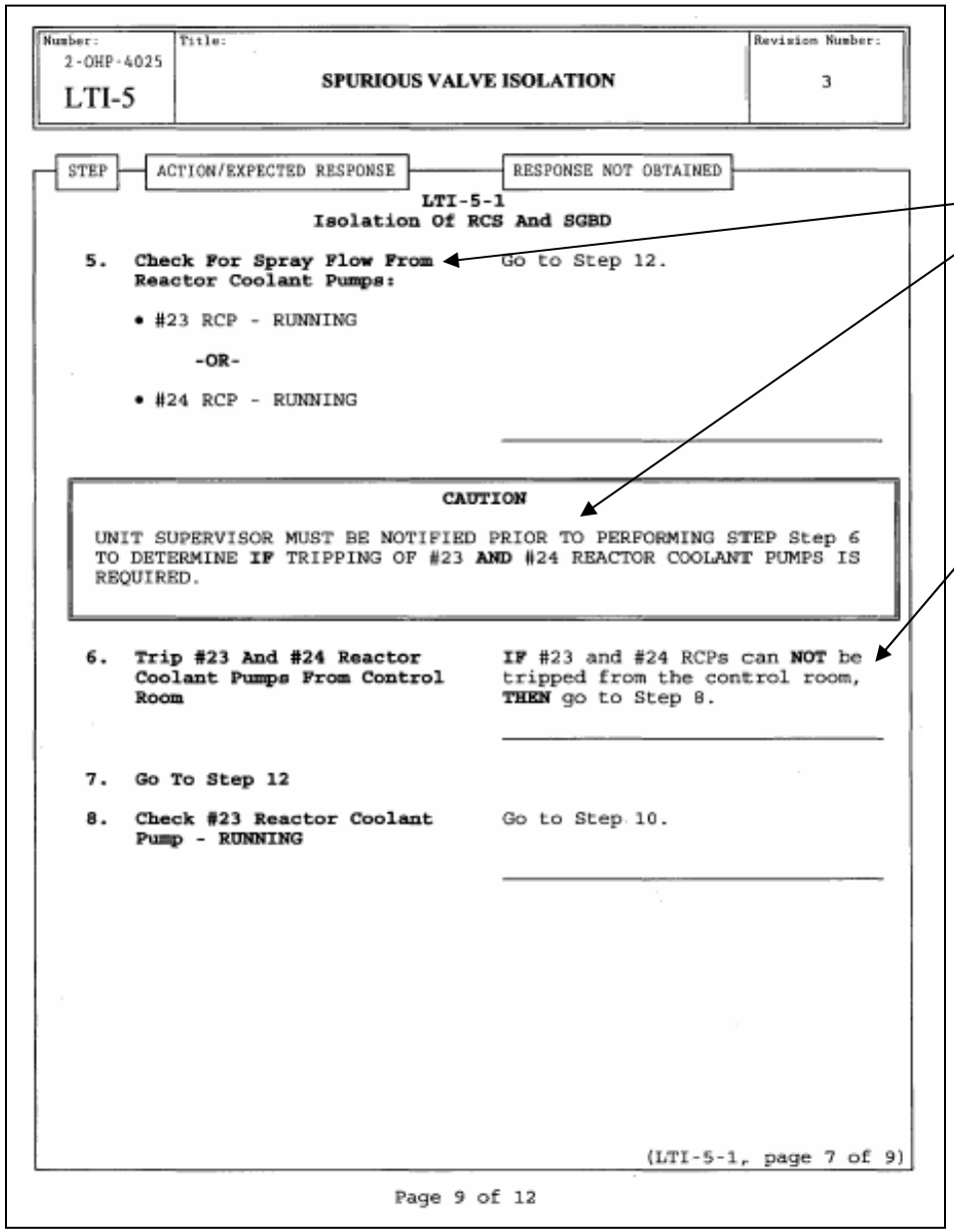
- 2-NRV-164

(LTI-5-1 page 6 of 9)

CT: Operator simulates opening 2-MDCD circuit #1 breaker.

Cue: Breaker is in the OFF position.

Operator contacts US to determine Spray status.
Cue: Spray valve position is unknown.



Number:	Title:	Revision Number:
2-OHP-4025 LTI-5	SPURIOUS VALVE ISOLATION	3

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

LTI-5-1
Isolation Of RCS And SGBD

5. **Check For Spray Flow From Reactor Coolant Pumps:**

   - #23 RCP - RUNNING

   -OR-

   - #24 RCP - RUNNING

   Go to Step 12.

CAUTION

UNIT SUPERVISOR MUST BE NOTIFIED PRIOR TO PERFORMING STEP Step 6 TO DETERMINE **IF** TRIPPING OF #23 **AND** #24 REACTOR COOLANT PUMPS IS REQUIRED.

6. **Trip #23 And #24 Reactor Coolant Pumps From Control Room**

   IF #23 and #24 RCPs can **NOT** be tripped from the control room, **THEN** go to Step 8.

7. **Go To Step 12**

8. **Check #23 Reactor Coolant Pump - RUNNING**

   Go to Step 10.

(LTI-5-1, page 7 of 9)

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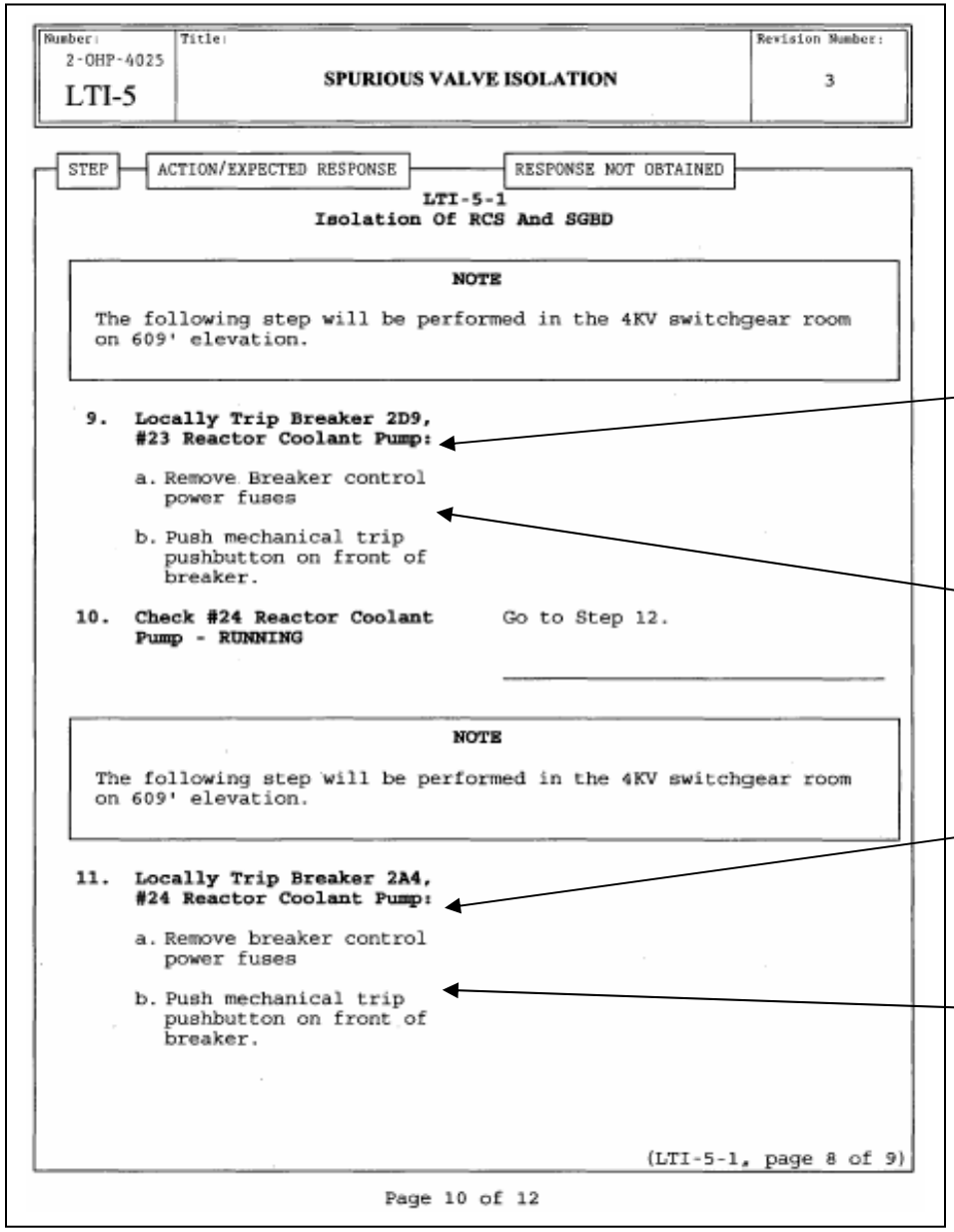
Operator contacts US to determine RCP status.
Cue: #23 and #24 RCPs are running.

Cue: "The Unit Supervisor directs you to locally trip the #23 and #24 RCPs

Operator should go to step 8 since Control Room is unavailable.



Number:	Title:	Revision Number:
2-OHP-4025 LTI-5	SPURIOUS VALVE ISOLATION	3

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

LTI-5-1
Isolation Of RCS And SGBD

NOTE

The following step will be performed in the 4KV switchgear room on 609' elevation.

9. **Locally Trip Breaker 2D9, #23 Reactor Coolant Pump:**

   a. Remove Breaker control power fuses

   b. Push mechanical trip pushbutton on front of breaker.

10. **Check #24 Reactor Coolant Pump - RUNNING** — Go to Step 12.

NOTE

The following step will be performed in the 4KV switchgear room on 609' elevation.

11. **Locally Trip Breaker 2A4, #24 Reactor Coolant Pump:**

    a. Remove breaker control power fuses

    b. Push mechanical trip pushbutton on front of breaker.

(LTI-5-1, page 8 of 9)

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NOTE: Per OH-4016, the operator must don minimal Flash Gear to perform fuse removal (Hood with face shield, Insulating protective gloves, Flash coat, and Leggings). Actual donning of gear for this JPM is not required, however, operator should be able to locate storage areas for gear and determine the required gear to be worn.

CT Operator simulates donning Flash Gear and removing control power fuses.

Cue: Flash Gear is in place and the RED indicating light is NOT LIT.

CT Operator simulates depressing the mechanical trip pushbutton.

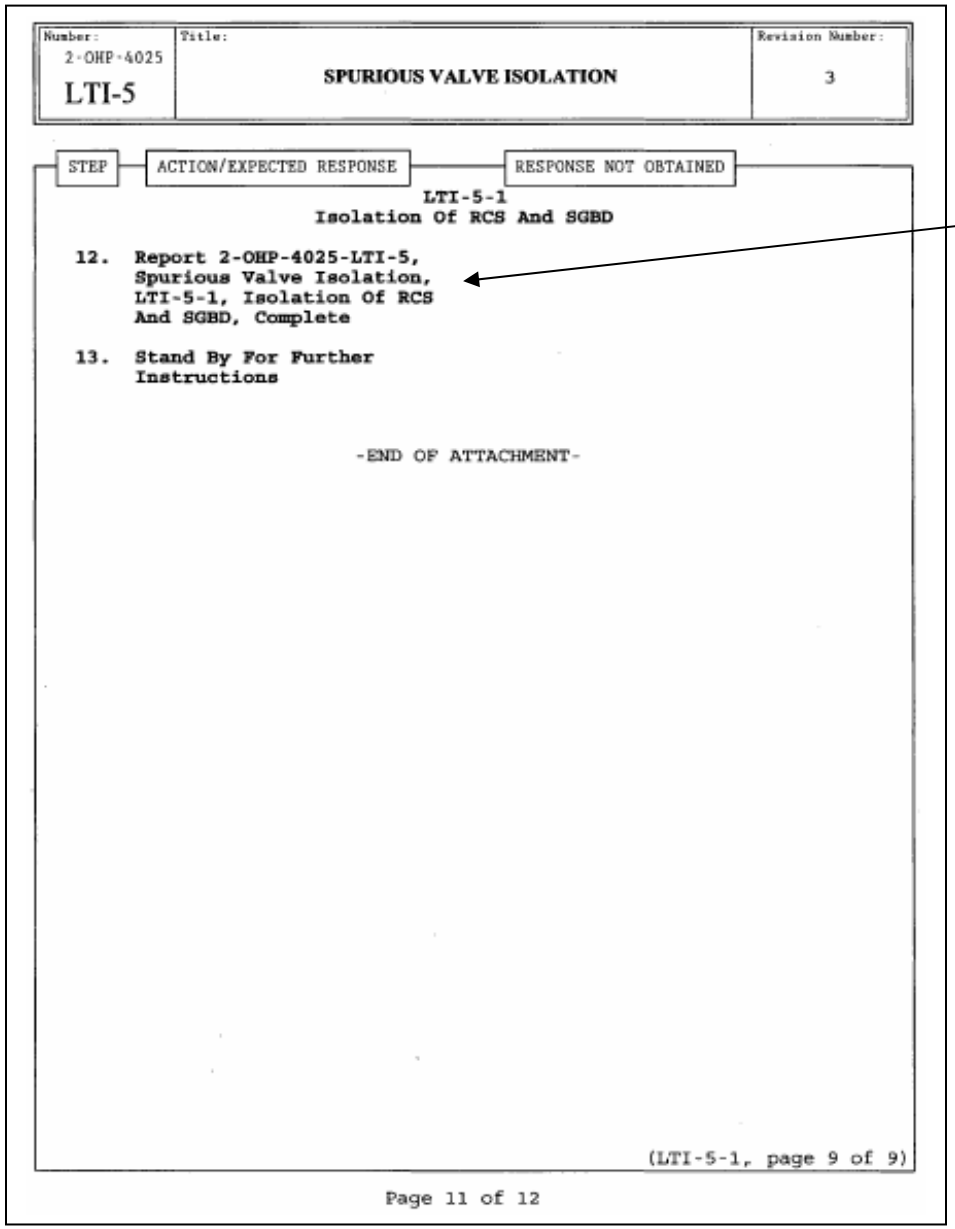
Cue: You here a loud noise. A GREEN target is showing and the springs charged indicators are NOT visible."

CT Operator simulates removing control power fuses.

Cue: The RED indicating light is NOT LIT.

CT Operator simulates depressing the mechanical trip pushbutton.

Cue: You here a loud noise. A GREEN target is showing and the springs charged indicators are NOT visible."



Number:	Title:	Revision Number:
2-OHP-4025 LTI-5	SPURIOUS VALVE ISOLATION	3

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

LTI-5-1
Isolation Of RCS And SGBD

12. Report 2-OHP-4025-LTI-5, Spurious Valve Isolation, LTI-5-1, Isolation Of RCS And SGBD, Complete

13. Stand By For Further Instructions

-END OF ATTACHMENT-

(LTI-5-1, page 9 of 9)

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Operator reports that LTI-5-1 is complete.

Cue: The US acknowledges LTI-5-1 is complete.

EVALUATOR: This Completes the JPM

Task Briefing

The Shift Manager (SM) has implemented 02-OHP-4025.001.001, Emergency Remote Shutdown procedure. The Unit 2 control room has been evacuated and is NOT accessible. The SM directs you to perform local RCS and SGBD isolation in accordance with Section LTI-5-1 of 02-OHP 4025.LTI-5.