



James A. FitzPatrick Nuclear Power Plant
OPERATIONS TRAINING PROGRAMS
JOB PERFORMANCE MEASURE

S/RO _____ TASK TITLE: RCIC LEVEL CONTROL, ALTERNATE PATH
 APPL. TO _____ NEW _____ JPM NUMBER _____

REV: 0 DATE: 7/2/03 NRC K/A SYSTEM NUMBER: _____

JAF TASK NUMBER: _____ JAF QUAL STANDARD NUMBER: _____

ESTIMATED COMPLETION TIME: 10 Minutes

SUBMITTED: [Signature] OPERATION REVIEW: [Signature] for Trabitt

APPROVED: [Signature]

CANDIDATE NAME: _____ S.S. NUMBER: _____

JPM Completion: () Simulated (x) Performed

Location: () Plant (x) Simulator

DATE PERFORMED: _____ TIME TO COMPLETE: _____ Minutes

PERFORMANCE EVALUATION: () Satisfactory () Unsatisfactory

COMMENTS: (MANDATORY FOR UNSATISFACTORY PERFORMANCE)

EVALUATOR: _____
 SIGNATURE/PRINTED

CANDIDATE REVIEW: _____
 SIGNATURE

REVIEWED BY: _____ DOC. COMPLETE: _____
 PROGRAM ADMINISTER

**JOB PERFORMANCE MEASURE
RECORD AND CHECKLIST**

S/RO
APPL. TO

NEW
JPM NUMBER

TASK TITLE: RCIC LEVEL CONTROL, ALTERNATE PATH

Current Update: 7/2/03
Date

By: RWD
Int.

Outstanding Items:

Technical Review

Additional Information

Questions and Answers

Validation

Procedural Change Required

None

Comments:

Previous Revision Dates:

**JOB PERFORMANCE MEASURE
REQUIRED TASK INFORMATION**

S/RO _____
APPL. TO

NEW _____
JPM NUMBER

TASK TITLE: RCIC LEVEL CONTROL, ALTERNATE PATH

I. SAFETY CONSIDERATIONS

- A. Ensure proper safety equipment and safety procedures are observed.

II. REFERENCES

- A. OP-19, REACTOR CORE ISOLATION COOLING SYSTEM, Revision 42

III. TOOLS AND EQUIPMENT

- A. None

IV. SET UP REQUIREMENTS

- A. Simulator in any Plant Shutdown IC
- B. RPV water level above RCIC initiation and below hi level trip setpoints
- C. Malfunction RC07B, RCIC Speed Control Failure to LSS
- D. Malfunction RC02, RCIC Auto Start Failure

V. EVALUATOR NOTES

- A. If performing JPM in the plant, inform the candidate that the conditions of each step need only be properly identified and not actually performed.
- B. The candidate should, at a minimum, identify the change in equipment status light indication when equipment operation is simulated.

VI. TASK CONDITIONS

- A. The candidate will place the RCIC system in level control and recognize that the flow controller did not provide for the required 400 gpm
- B. The candidate will take manual control of RCIC turbine speed and inject to the RPV

* - CRITICAL STEP

S/RO

TASK TITLE: RCIC LEVEL CONTROL, ALTERNATE PATH

VII. INITIATING CUE

The plant is being controlled in accordance with EOP-2. RCIC is the only available High Pressure injection source. You have level control using RCIC. Your level band is 177-222.5 inches.

TASK STANDARD

The candidate will startup RCIC in level control per OP-19 section D.1 or Posted Attachment 6. The candidate will recognize that RCIC did not startup to the expected 400 gpm and take manual control as supported by AP-12.03 Step 8.1.3.A.

	STEP	STANDARD	EVALUATION / COMMENT
1.	Obtain current revision of procedure	Candidate obtains OP-19 Section D.1 or Posted Attachment 6	SAT / UNSAT
2.	1. Verify Annunciator 09-4-0-32 RCIC LOGIC RX LVL HI is clear.	Candidate observes annunciator window is not lit	SAT / UNSAT
3.	2. Verify RCIC is lined up to one of the following suction paths: CST SUCT VLV 13MOV-18 open for suction from CSTs OR The following valves open for suction from torus: - INBD TORUS SUCT 13MOV-41 - OUTBD TORUS SUCT 13MOV-39	Candidate observes that 13MOV-18 is open (Red lamp lit, Green lamp dark) AND 13MOV-41 and 39 are closed (Red lamp dark and green lamp lit)	SAT / UNSAT
*4.	3. Start VAC PMP 13P-3.	Candidate selects 13P-3 control switch to start and observes red lamp lit and green lamp dark	SAT / UNSAT
*5.	4. Open OIL CLR WTR SUPP 13MOV-132.	Candidate opens 13MOV-132 and observes red lamp lit and green lamp dark	SAT / UNSAT
*6.	5. Perform the following without unnecessary delay: a. Open TURB STM SUPP VLV 13MOV-131. b. Open INJ VLV 13MOV-21.	Candidate expeditiously opens 13MOV-131 and 13MOV-21 and observes red lamp lit and green lamp dark for both. EVALUATOR Cue console operator to trigger speed controller malfunction while valves are opening	SAT / UNSAT

S/RO

TASK TITLE: RCIC LEVEL CONTROL, ALTERNATE PATH

	STEP	STANDARD	EVALUATION / COMMENT
*7.	6. Verify RCIC flow rate is approximately 400 gpm.	Candidate observes that flow rate DID NOT achieve 400 gpm and RCIC PUMP FLO LO alarm is received. Candidate exercises AP-12.03 guidance to take manual control of the RCIC speed controller and adjust to 400 gpm EVALUATOR If candidate identifies misoperation and seeks supervisory guidance, ask for a recommendation and concur with it.	SAT / UNSAT
8.	7. Ensure closed the following valves: MIN FLOW VLV 13MOV-27. STM LINE DRN TO RADW 13AOV-34 STM LINE DRN TO RADW 13AOV-35	Candidate observes green lamp lit and red lamp dark for 13MOV-27, 13AOV-34 and 13AOV-35	SAT / UNSAT
9.	8. WHILE RCIC is in operation, maintain RPV water level LESS THAN HPCI/RCIC High Level Trip Value shown on Attachment 3.	Candidate observes upward trend in RPV level and monitors for approach to Attachment 3 value	SAT / UNSAT
10.	9. Start up RHR torus cooling per Section D of OP-13B, as soon as practicable.	EVALUATOR Inform candidate that another operator is performing this action.	SAT / UNSAT
EVALUATOR: Terminate the task at this point.			



James A. FitzPatrick Nuclear Power Plant
OPERATIONS TRAINING PROGRAMS
JOB PERFORMANCE MEASURE

S/RO NEW TASK TITLE: Reopen MSIV's with RPV Pressurized
APPL. TO JPM NUMBER

REV: 0 DATE: 5/10/03 NRC K/A SYSTEM NUMBER: 239001 A4.04 3.8/3.7

JAF TASK NUMBER: _____ JAF QUAL STANDARD NUMBER: _____

ESTIMATED COMPLETION TIME: 15 Minutes

SUBMITTED: [Signature] OPERATION REVIEW: [Signature] for Turbitt

APPROVED: [Signature]

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CANDIDATE NAME: \_\_\_\_\_ S.S. NUMBER: \_\_\_\_\_

JPM Completion: ( ) Simulated (X) Performed

Location: ( ) Plant (X) Simulator

DATE PERFORMED: \_\_\_\_\_ TIME TO COMPLETE: \_\_\_\_\_ Minutes

PERFORMANCE EVALUATION: ( ) Satisfactory ( ) Unsatisfactory

~~~~~  
COMMENTS: (MANDATORY FOR UNSATISFACTORY PERFORMANCE)

EVALUATOR: _____
SIGNATURE/PRINTED

CANDIDATE REVIEW: _____
SIGNATURE

REVIEWED BY: _____ DOC. COMPLETE: _____
PROGRAM ADMINISTER

**JOB PERFORMANCE MEASURE
RECORD AND CHECKLIST**

S/RO
APPL. TO

NEW
JPM NUMBER

TASK TITLE: Reopen MSIV's with RPV Pressurized

Current Update: 5/10/03
Date

By: RWD
Int.

Outstanding Items:

Technical Review

Additional Information

Questions and Answers

Validation

Procedural Change Required

None

Comments:

Simulator Validated 5/17/03. IC-131.

Previous Revision Dates:

**JOB PERFORMANCE MEASURE
REQUIRED TASK INFORMATION**

S/RO
APPL. TO

NEW
JPM NUMBER

TASK TITLE: Reopen MSIV's with RPV Pressurized

I. SAFETY CONSIDERATIONS

- A. Ensure proper safety equipment and safety procedures are observed.

II. REFERENCES

- A. EP-9; OPENING MSIV's

III. TOOLS AND EQUIPMENT

- A. None

IV. SET UP REQUIREMENTS

- A. Rx Scrammed with MSIV's closed.
B. RPV Level > 126.5 and < 222.5.
C. RPV Pressure Control on SRV's/HPCI/RCIC at 800-1000 psig.
D. PCIS Group I isolation signals reset

V. EVALUATOR NOTES

- A. If performing JPM in the plant, inform the candidate that the conditions of each step need only be properly identified and not actually performed.
B. The candidate should, at a minimum, identify the change in equipment status light indication when equipment operation is simulated.

VI. TASK CONDITIONS

- A. Plant is post scram with MSIV's closed

* - CRITICAL STEP

S/RO NEW

TASK TITLE: Reopen MSIV's with RPV Pressurized

VII. INITIATING CUE:

The reactor has scrammed and the MSIV's are closed. MSIV isolation signals have been reset. Another operator has RPV pressure control on the SRV's at 800-1000 psig. The plant is being controlled as directed by the EOP's. To reestablish the main condenser as the heat sink, equalize and reopen the MSIV's per EP-9.

TASK STANDARD

The candidate will equalize to less than a 200 psid D/P and open the MSIV's per EP-9

	STEP	STANDARD	EVALUATION / COMMENT
1.	Obtain a controlled copy of procedure EP-9, OPENING MSIV's	The candidate obtains a controlled copy of EP-9.	SAT / UNSAT
2.	Review the Precautions and Special Instructions.	The candidate reviews the precautions and special instructions, making note of any that are applicable.	SAT / UNSAT
3.	IF differential pressure across the MSIVs is LESS THAN OR EQUAL TO 200 psid, THEN perform the following:	Candidate uses 06PI-90A, B, and or C at panel 09-5 and MAIN STEAM PRESS A and or B at EHC section of panel 09-5 to determine that differential pressure exceeds 200 psid.	SAT / UNSAT

S/RO NEW

TASK TITLE: Reopen MSIV's with RPV Pressurized

	STEP	STANDARD	EVALUATION / COMMENT
4.	Ensure closed the following valves: ✓ MSIV 29AOV-80A-D ✓ MSIV 29AOV-86A-D ✓ MAIN STM DRN 29MOV-74, 77, 78 and 79 ✓ MAIN STM DRN VLV 29MOV-101A-D ✓ RFPT A and B HP STOP VLV HP SVA-1 and SVB-1 ✓ TSV-1-4 ✓ TO PCV 96MOV-S1 ✓ PCV BYP 96MOV-S2 ✓ 29MST-105 (SJAE MST supply 29PCV-107 outlet isol valve) (remote operated from East Electric Bay) ✓ 29MST-107 (SJAE MST supply 29PCV-107 bypass strainer outlet isol valve) (remote operated from East Electric Bay)	Candidate closes and/or observes green closed light on and red open light off at the following locations: ✓ MSIV 29AOV-80A-D at 09-3 and 09-4 ✓ MSIV 29AOV-86A-D at 09-3 and 09-4 ✓ MAIN STM DRN 29MOV-74, 77, 78 and 79 at 09-3 and 09-4 ✓ MAIN STM DRN VLV 29MOV-101A-D at 09-7 ✓ RFPT A and B HP STOP VLV HP SVA-1 at 09-6 ✓ TSV-1-4 at 09-5 ✓ TO PCV 96MOV-S1 at 09-7 ✓ PCV BYP 96MOV-S2 at 09-7 ✓ 29MST-105 (SJAE MST supply 29PCV-107 outlet isol valve) (remote operated from East Electric Bay) by telcon to NPO ✓ 29MST-107 (SJAE MST supply 29PCV-107 bypass strainer outlet isol valve) (remote operated from East Electric Bay) by telcon to NPO.	SAT / UNSAT
*5.	Open the following valves: MAIN STM DRN 29MOV-74 MAIN STM DRN 29MOV-77	At panel 09-3 and 4 candidate opens 29 MOV-74 and 77 and observes green closed light off and red open light on.	SAT / UNSAT
6.	Jog open MAIN STM DRN 29MOV-79 until full open.	At panel 09-4 candidate jogs opens 29 MOV-79 until full open and observes green closed light off and red open light on.	SAT / UNSAT
*7.	Open the following valves: MSIV 29AOV-86A MSIV 29AOV-86B MSIV 29AOV-86C MSIV 29AOV-86D	At panel 09-3 candidate opens 29AOV-86 A-D and observes green closed light off and red open light on.	SAT / UNSAT
*8.	Open MAIN STM DRN 29MOV-78.	At panel 09-4 candidate opens 29 MOV-78 and observes green closed light off and red open light on.	SAT / UNSAT

S/RO NEW

TASK TITLE: Reopen MSIV's with RPV Pressurized

	STEP	STANDARD	EVALUATION / COMMENT
9.	Close MAIN STM DRN 29MOV-79.	EVALUATOR Act as SM and waive step 5.9 At panel 09-4 candidate closes 29 MOV-79 and observes green closed light on and red open light off.	SAT / UNSAT
*10.	WHEN differential pressure across the MSIVs is LESS THAN OR EQUAL TO 200 psid, open the following valves: MSIV 29AOV-80A MSIV 29AOV-80B MSIV 29AOV-80C MSIV 29AOV-80D	Candidate uses 06PI-90A, B, and or C at panel 09-5 and MAIN STEAM PRESS A and or B at EHC section of panel 09-5 to determine differential pressure. When differential pressure is < 200 psid, candidate opens 29AOV-80 A-D at panel 09-4 and observes green closed light off and red open light on.	SAT / UNSAT
EVALUATOR: Terminate the task at this point.			

**JOB PERFORMANCE MEASURE
RECORD AND CHECKLIST**

S/RO

20101007F

TASK TITLE: Conduct Emergency Rod In Functional Test,
Alternate Path

APPL. TO

JPM NUMBER

Current Update: 5/10/03
Date

By: RWD
Int.

Outstanding Items:

Technical Review

Additional Information

Questions and Answers

Validation

Procedural Change Required

None

Comments:

Simulator Validated 5/17/03. IC-132

Previous Revision Dates:

11/08/88

3/02/92

04/26/93

12/02/93

08/29/94

03/05/99

**JOB PERFORMANCE MEASURE
REQUIRED TASK INFORMATION**

S/RO

20101007F

TASK TITLE: Conduct Emergency Rod In Functional Test,
Alternate Path

APPL. TO

JPM NUMBER

I. SAFETY CONSIDERATIONS

- A. Ensure proper safety equipment and safety procedures are observed.

II. REFERENCES

- A. OP-65 START-UP AND SHUTDOWN PROCEDURE, Rev. 97.

III. TOOLS AND EQUIPMENT

- A. None

IV. SET UP REQUIREMENTS

- A. Initialize the simulator to an IC with the Reactor S/D, all control rods at 00, ready to pull rods.
B. Make a copy of the necessary rod withdrawal sheets for use by the candidate.
C. Replace the indicating light bulb for the ROD OUT PERM with a "burned out" bulb **OR** override the light OFF until the candidate removes the old bulb to replace it, **THEN** remove the override.
D. Ensure reactor analyst instructions pull sheet sequence agrees with simulator load.
E. Ensure Rod Sequence Selector Switch is selected to the identified sequence and the Rod Sequence Mode Switch is selected to Withdraw

V. EVALUATOR NOTES

- A. If performing JPM in the plant, inform the candidate that the conditions of each step need only be properly identified and not actually performed.
B. The candidate should, at a minimum, identify the change in equipment status light indication when equipment operation is simulated.

VI. TASK CONDITIONS

- A. Plant is conducting a reactor startup.
B. The mode switch has just been placed in the START/HOT STBY Position.
C. The "Emergency Rod In" function must be demonstrated prior to withdrawing control rods.
D. All prerequisite conditions for performing this function have been met.

* - CRITICAL STEP

S/RO 20101007F

TASK TITLE: Conduct Emergency Rod In Functional Test, Alternate Path

VII. INITIATING CUE

Inform the candidate, "A reactor startup is about to be commenced. All pre-startup forms have been filled out and all prerequisites have been met. The mode switch has just been placed in the START/HOT STBY Position. Verify that the Emergency Rod In capability is functioning properly per OP-65."

TASK STANDARD

The candidate will conduct the test per OP-65 Step D.14.8. Candidate will be unable to perform the verification of D.14.8.c until a blown bulb is replaced per AP-02.05 Attachment 2 Step E.

	STEP	STANDARD	EVALUATION / COMMENT
1.	Obtain a copy of OP-65, START-UP AND SHUTDOWN PROCEDURE.	The candidate obtains a copy of OP-65.	SAT / UNSAT
2.	Select the correct section to perform the task.	The candidate selects Section D.14, Transition to Mode 2, step D.14.8	SAT / UNSAT
*3.	Depress select pushbutton for any control rod in RWM Group 1 on ROD SEL matrix.	The candidate depresses select pushbutton for any control rod in RWM Group 1 on ROD SEL matrix. EVALUATOR: Provide candidate with rod withdrawal sheets.	SAT / UNSAT
4.	Verify Annunciator 09-5-2-2, ROD WITHDRAWAL BLOCK is clear.	The candidate verifies Annunciator 09-5-2-2, ROD WITHDRAWAL BLOCK is clear.	SAT / UNSAT
*5.	Verify white ROD OUT PERM light is on.	The candidate recognizes the white ROD OUT PERM light is <u>not</u> on.	SAT / UNSAT
*6.	Checks ROD OUT PERM light bulb.	The candidate replaces the burned out light bulb for the white ROD OUT PERM light.	SAT / UNSAT
*7.	Verify white ROD OUT PERM light is on.	The candidate verifies the white ROD OUT PERM light is on.	SAT / UNSAT
*8.	Withdraw selected rod from position 00 to position 06 per OP-26.	The candidate withdraws the selected Control Rod from position 00 to position 06 per OP-26. EVALUATOR: Candidate may <u>not</u> choose to use Notch Override mode of rod withdrawal. Final position of rod should not exceed 06.	SAT / UNSAT
*9.	Insert selected control rod from position 06 to position 00 using ROD EMERG IN NOTCH OVERRIDE switch.	The candidate inserts selected control rod from position 06 to 00 using ROD EMERG IN NOTCH OVERRIDE switch.	SAT / UNSAT
EVALUATOR: Terminate the task at this point.			



James A. FitzPatrick Nuclear Power Plant
OPERATIONS TRAINING PROGRAMS
JOB PERFORMANCE MEASURE

S/RO _____ NEW _____ TASK TITLE: GROUP 1 ISOLATION RESET
 APPL. TO _____ JPM NUMBER _____

REV: 0 DATE: 5/10/03 NRC K/A SYSTEM NUMBER: 223002 A4.03 3.6/3.5

JAF TASK NUMBER: _____ JAF QUAL STANDARD NUMBER: _____

ESTIMATED COMPLETION TIME: 10 Minutes

SUBMITTED: [Signature] OPERATION REVIEW: [Signature] for Tom Bitt

APPROVED: [Signature]

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 CANDIDATE NAME: \_\_\_\_\_ S.S. NUMBER: \_\_\_\_\_

JPM Completion: ( ) Simulated (X) Performed

Location: ( ) Plant (X) Simulator

DATE PERFORMED: \_\_\_\_\_ TIME TO COMPLETE: \_\_\_\_\_ Minutes

PERFORMANCE EVALUATION: ( ) Satisfactory ( ) Unsatisfactory

~~~~~  
 COMMENTS: (MANDATORY FOR UNSATISFACTORY PERFORMANCE)

EVALUATOR: _____
 SIGNATURE/PRINTED

CANDIDATE REVIEW: _____
 SIGNATURE

REVIEWED BY: _____ DOC. COMPLETE: _____
 PROGRAM ADMINISTER

**JOB PERFORMANCE MEASURE
RECORD AND CHECKLIST**

S/RO
APPL. TO

NEW
JPM NUMBER

TASK TITLE: GROUP 1 ISOLATION RESET

Current Update: 5/10/03
Date

By: RWD
Int.

Outstanding Items:

Technical Review

Additional Information

Questions and Answers

Validation

Procedural Change Required

None

Comments:

Simulator validated 5/17/03. IC-131

Previous Revision Dates:

**JOB PERFORMANCE MEASURE
REQUIRED TASK INFORMATION**

S/RO
APPL. TO

NEW
JPM NUMBER

TASK TITLE: GROUP 1 ISOLATION RESET

I. SAFETY CONSIDERATIONS

- A. Ensure proper safety equipment and safety procedures are observed.

II. REFERENCES

- A. AOP-15, ISOLATION VERIFICATION AND RECOVERY Rev 21

III. TOOLS AND EQUIPMENT

- A. None

IV. SET UP REQUIREMENTS

- A. Current copy of AOP-15.
- B. Setup simulator with post trip conditions following MSIV closure on low steam pressure and ready for re-opening.

V. EVALUATOR NOTES

- A. If performing JPM in the plant, inform the candidate that the conditions of each step need only be properly identified and not actually performed.
- B. The candidate should, at a minimum, identify the change in equipment status light indication when equipment operation is simulated.

VI. TASK CONDITIONS

- A. Conditions have occurred which caused the MSIVs to isolate on low steam pressure.
- B. Action to restore the main condenser as a heat sink must be completed

* - CRITICAL STEP

S/RO/NLO NEW

TASK TITLE: GROUP 1 ISOLATION RESET

VII. INITIATING CUE

Conditions have occurred which caused the MSIVs to isolate on low steam pressure. The cause of the isolation has been corrected. All radiological conditions and Reactor Chemistry samples are within normal bands. Reset the MSIV isolation using AOP-15."

TASK STANDARD

The candidate will reset the PCIS Group I isolation per AOP-15 Section C.2

	STEP	STANDARD	EVALUATION / COMMENT
1.	Obtain a controlled copy of AOP-15.	Obtains a controlled copy of AOP-15 and selects section C.2.	SAT / UNSAT
2.	CAUTION: The circumstances leading to an isolation could have caused high radioactivity levels in the drywell or in reactor coolant.	Informs SM/CRS of CAUTION. <u>EVALUATOR:</u> Acknowledge candidate and respond that there is no concern for high radioactivity levels in drywell or reactor coolant.	SAT / UNSAT
3.	Verify Group 1 Isolation per posted Attachment 5.	Selects the posted attachment 5 and at panel 09-3 and/or 09-4 confirms green closed light on and red open light off for: ✓ 29 AOV-80 A-D ✓ 29 AOV-86 A-D ✓ 29 MOV-74 and 77	SAT / UNSAT
4.	Determine and correct cause of the isolation.	Candidate may confirm initiating cue information that cause has been determined and corrected. <u>EVALUATOR:</u> If asked, confirm that cause is known and corrected and candidate may proceed as directed.	SAT / UNSAT

	STEP	STANDARD	EVALUATION / COMMENT
5.	IF cause of isolation was high main steam line radiation, THEN	Reviews step and determines that cause was NOT a result of high main steam line radiation and a release will not occur as a result of isolation reset. EVALUATOR: If candidate requests, respond that an undesirable release will not occur.	SAT / UNSAT
6.	Determine whether an undesired release will occur when isolation is reset. Request RES assistance if in doubt.	Reviews step and determines that release will not occur as a result of isolation reset. EVALUATOR: If candidate requests, respond that an undesirable release will not occur.	SAT / UNSAT
7.	WHEN it has been determined that an undesired release <u>will not</u> occur when isolation is reset, continue with procedure.	Reviews step and determines that release will not occur as a result of isolation reset. EVALUATOR: If candidate requests, respond that an undesirable release will not occur.	SAT / UNSAT
* 8.	Ensure control switches for the following valves are in CLOSE: <ul style="list-style-type: none"> • RWR LOOP B SMPL ISOL VLV 02-2AOV-39 • RWR LOOP B SMPL ISOL VLV 02-2AOV-40 	At 09-3 and 09-4 panels, place the valve switches in close and confirm green closed light on and red open light off.	SAT / UNSAT
* 9.	IF MSIVs are closed, THEN place control switch for each of the following valves in CLOSE: <ul style="list-style-type: none"> • MSIV 29AOV-80A • MSIV 29AOV-80B • MSIV 29AOV-80C • MSIV 29AOV-80D • MSIV 29AOV-86A • MSIV 29AOV-86B • MSIV 29AOV-86C • MSIV 29AOV-86D 	At 09-3 and 09-4 panels, place the valve switches in close and confirm green closed light on and red open light off.	SAT / UNSAT

S/RO/NLO NEW

TASK TITLE: GROUP 1 ISOLATION RESET

	STEP	STANDARD	EVALUATION / COMMENT
10.	NOTE: Step C.2.8 is not required to open MSIVs if Group 1 isolation was due to high main steam line radiation (3X normal full power background).	Reviews NOTE and determines that step C.2.8 IS REQUIRED . EVALUATOR: If candidate requests feedback regarding Note, acknowledge the isolation was not due to high radiation.	SAT / UNSAT
* 11.	Simultaneously rotate the following PCIS VLV RESET switches to both RESET positions, spring return to NORM: <ul style="list-style-type: none">• 16A-S32• 16A-S33	At panel 09-5, operates the switches and confirm annunciators 09-5-1-55 and 56 clear.	SAT / UNSAT
12.	NOTE: Steps C.2.9 and C.2.10 may be performed in any order at the Shift Manager's discretion.	Reviews Note and requests feedback from SM regarding priority for action. EVALUATOR: When candidate requests feedback regarding step priority, acknowledge the MSIVs have priority.	SAT / UNSAT
EVALUATOR: Terminate the task at this point.			



James A. FitzPatrick Nuclear Power Plant
OPERATIONS TRAINING PROGRAMS
JOB PERFORMANCE MEASURE

S/RO NEW TASK TITLE: SGT Initiation Verification (Alternate Path)
APPL. TO JPM NUMBER

REV: 0 DATE: 5/13/03 NRC K/A SYSTEM NUMBER: 261000.A4.06.3.3/3.6

JAF TASK NUMBER: _____ JAF QUAL STANDARD NUMBER: _____

ESTIMATED COMPLETION TIME: 15 Minutes

SUBMITTED: [Signature] OPERATION REVIEW: [Signature] for Tenbitt

APPROVED: [Signature]

CANDIDATE NAME: _____ S.S. NUMBER: _____

JPM Completion: () Simulated (X) Performed

Location: () Plant (X) Simulator

DATE PERFORMED: _____ TIME TO COMPLETE: _____ Minutes

PERFORMANCE EVALUATION: () Satisfactory () Unsatisfactory

COMMENTS: (MANDATORY FOR UNSATISFACTORY PERFORMANCE)

EVALUATOR: _____
SIGNATURE/PRINTED

CANDIDATE REVIEW: _____
SIGNATURE

REVIEWED BY: _____ DOC. COMPLETE: _____
PROGRAM ADMINISTER

**JOB PERFORMANCE MEASURE
RECORD AND CHECKLIST**

S/RO

NEW

TASK TITLE: SGT Initiation Verification (Alternate Path)

APPL. TO

JPM NUMBER

Current Update: 5/13/03
Date

By: RWD
Int.

Outstanding Items:

Technical Review

Additional Information

Questions and Answers

Validation

Procedural Change Required

None

Comments:

Simulator validated 5/17/03. IC-131.

Previous Revision Dates:

**JOB PERFORMANCE MEASURE
REQUIRED TASK INFORMATION**

S/RO

NEW

TASK TITLE: SGT Initiation Verification (Alternate Path)

APPL. TO

JPM NUMBER

I. SAFETY CONSIDERATIONS

- A. Ensure proper safety equipment and safety procedures are observed.

II. REFERENCES

- A. OP-20; Standby Gas Treatment System

III. TOOLS AND EQUIPMENT

- A. None

IV. SET UP REQUIREMENTS

- A. RWCU Steam Leak into Rx Bldg such that RB Pressure is > -.25 inches.
- B. SGT "B" Failure to Auto Initiate or manually stopped after auto initiation.
- C. RBV Low RPV water level isolation/SGT Initiation

V. EVALUATOR NOTES

- A. If performing JPM in the plant, inform the candidate that the conditions of each step need only be properly identified and not actually performed.
- B. The candidate should, at a minimum, identify the change in equipment status light indication when equipment operation is simulated.

VI. TASK CONDITIONS

- A.
- B.

* - CRITICAL STEP

S/RO NEW
 TASK TITLE: SGT Initiation Verification (Alternate Path)

VII. INITIATING CUE:

A Steam Leak into the Reactor Building from Reactor Water Cleanup has occurred. The plant has been manually scrammed and operation being controlled by EOP-2. Verify Standby Gas Treatment System Initiation.

TASK STANDARD

The candidate will verify proper initiation of the Standby Gas Treatment system per OP-20. The candidate will observe that the B train is not running as expected and that Reactor Building D/P requires its operation. The candidate will then startup the B train.

	STEP	STANDARD	EVALUATION / COMMENT
1.	Obtain a controlled copy of procedure OP-20, Standby Gas Treatment System	The candidate obtains a controlled copy of OP-20.	SAT / UNSAT
2.	Review the Precautions and Special Instructions.	The candidate reviews the precautions and special instructions, making note of any that are applicable.	SAT / UNSAT
3.	Identify appropriate procedure section	Select Section G.5 or G.6 or Posted Attachment 3. EVALUATOR NOTE Actions written for Posted Attachment 3. All actions at 09-75 panel	SAT / UNSAT
4.	1. Verify the following: <ul style="list-style-type: none"> ✓ White light for AIR HTR 01-125E-5A(B) is on ✓ Red light for AIR HTR 01-125E-5A(B) is on ✓ ABOVE EL 369' SUCT 01-125MOV-11(12) is open ✓ TRAIN A CLG VLV 01-125MOV-100A(B) is closed ✓ TRAIN A INLET 01-125MOV-14A(B) is open ✓ FN DISCH 01-125MOV-15A(B) is open ✓ TRAIN A FN 01-125FN-1A(B) is running 	Candidate confirms that all conditions are as expected for the "A" train and that none of the conditions are as expected for the "B" train. EVALUATOR Candidate may complete either train verification before proceeding to the other train	SAT / UNSAT

S/RO NEW

TASK TITLE: SGT Initiation Verification (Alternate Path)

	STEP	STANDARD	EVALUATION / COMMENT
5.	<p>2. IF one SGT is in service, THEN verify flow rate on SGT FLOW 01-125FI-106A:</p> <ul style="list-style-type: none"> ✓ RB un-isolated- Approximately 6000 scfm ✓ RB isolated- Approximately 5600 to 5800 scfm 	<p>Candidate confirms that the reactor Building is isolated and verifies ~5600-5800 scfm on 01-125FI-106A.</p>	<p>SAT / UNSAT</p>
6.	<p>3. IF initiation is due to Ventilation Hi Radiation, THEN keep train in service with suction aligned to affected area in next step.</p>	<p>Candidate determines that step is not applicable EVALUATOR If requested, confirm that initiation did NOT result from Ventilation Hi Radiation.</p>	<p>SAT / UNSAT</p>
7.	<p>NOTE: Shutdown of a SGT Train with an initiation signal present will prevent restart on a subsequent or different initiation signal. 4. IF both SGT trains auto-started, THEN shutdown one SGT train per Section F.</p>	<p>Candidate determines that "B" SGT train failed to start.</p>	<p>SAT / UNSAT</p>
*8.	<p>5. IF RX Bldg differential pressure is less negative than -0.25 inches water, THEN ensure both SGT Trains are in service per Subsection D.</p>	<p>Candidate determines that RB D/P warrants the start of "B" SGT per section D.2. EVALUATOR NOTE Candidate may report the Auto Initiation failure of "B" SGT and the need to manually start. Respond with order to start B SGT System.</p>	<p>SAT / UNSAT</p>
*9.	<p>D.2.1 Ensure open BELOW EL 369' SUCT 01-125MOV-12.</p>	<p>Candidate opens valve and confirms red light on and green light off</p>	<p>SAT / UNSAT</p>
*10.	<p>D.2.2 Ensure open TRAIN B INLET 01-125MOV-14B.</p>	<p>Candidate opens valve and confirms red light on and green light off</p>	<p>SAT / UNSAT</p>

S/RO NEW

TASK TITLE: SGT Initiation Verification (Alternate Path)

	STEP	STANDARD	EVALUATION / COMMENT
11.	D.2.3 Verify the following: <ul style="list-style-type: none">✓ White light for AIR HTR 01-125E-5B is on,✓ Red light for AIR HTR 01-125E-5B is on✓ TRAIN B CLG VLV 01-125MOV-100B is closed✓ FN DISCH 01-125MOV-15B is open✓ TRAIN B FN 01-125FN-1B is Running	Candidate confirms expected indications	SAT / UNSAT
12.	D.2.4 IF standby gas treatment is being placed in service to support any of the following: <ul style="list-style-type: none">✓ Torus venting✓ Drywell venting✓ HPCI operation✓ Main Steam Leakage Collection System operation✓ Auxiliary Gas Treatment System operation THEN ensure required standby gas treatment suction valves are lined up per the applicable procedure prior to proceeding to Step D.2.5.	Candidate determines that step is not applicable.	SAT / UNSAT

S/RO NEW

TASK TITLE: SGT Initiation Verification (Alternate Path)

	STEP	STANDARD	EVALUATION / COMMENT
13.	D.2.5 IF SGT Train A is shutdown, THEN perform the following: a. Verify open TRAIN A CLG VLV 01-125MOV-100A. b. Verify flow rate on SGT FLOW 01-125FI-106A: ✓ RB un-isolated- Approximately 6000 scfm ✓ RB isolated- Approximately 5600 to 5800 scfm	Candidate determines that step is not applicable	SAT / UNSAT
14.	D.2.6 IF RB DIFF PRESS 01-125DPI-100A or B indicates less negative than -0.25 inches water, THEN ensure SGT Train A is in service per Subsection D.1.	Candidate monitor RB Diff Pressure and report completion of SGT initiation verification.	SAT / UNSAT
EVALUATOR: Terminate the task at this point.			



James A. FitzPatrick Nuclear Power Plant
OPERATIONS TRAINING PROGRAMS
JOB PERFORMANCE MEASURE

S/RO _____ 20202001 _____ TASK TITLE: Jet Pump Operability, 2 Loop, ST-23C, Alternate Path

APPL. TO _____ JPM NUMBER _____

REV: 1 _____ DATE: 5/18/03 _____ NRC K/A SYSTEM NUMBER: 202001 K5.02 3.1/3.2 _____

JAF TASK NUMBER: _____ JAF QUAL STANDARD NUMBER: _____

ESTIMATED COMPLETION TIME: 25 Minutes

SUBMITTED: [Signature] _____ OPERATION REVIEW: [Signature] for Toubitt _____

APPROVED: [Signature] _____

CANDIDATE NAME: _____ S.S. NUMBER: _____

JPM Completion: () Simulated (X) Performed

Location: () Plant (X) Simulator

DATE PERFORMED: _____ TIME TO COMPLETE: _____ Minutes

PERFORMANCE EVALUATION: () Satisfactory () Unsatisfactory

COMMENTS: (MANDATORY FOR UNSATISFACTORY PERFORMANCE)

EVALUATOR: _____
SIGNATURE/PRINTED

CANDIDATE REVIEW: _____
SIGNATURE

REVIEWED BY: _____ DOC. COMPLETE: _____
PROGRAM ADMINISTER

JOB PERFORMANCE MEASURE

RECORD AND CHECKLIST

S/RO _____ 20202001 _____ TASK TITLE: Jet Pump Operability, 2 Loop, ST-23C, Alternate path

APPL. TO _____ JPM NUMBER _____

Current Update: 5/18/03 _____
Date

By: RWD
Int.

Outstanding Items:

_____ Technical Review

_____ Additional Information

_____ Questions and Answers

_____ Validation

_____ Procedural Change Required

_____ None

Comments:

Simulator validated 5/24/03. IC-133

Previous Revision Dates:

11/01

**JOB PERFORMANCE MEASURE
REQUIRED TASK INFORMATION**

S/RO _____

20202001 _____

TASK TITLE: Jet Pump Operability, 2 Loop, ST-23C, Alternate Path

APPL. TO _____

JPM NUMBER _____

I. SAFETY CONSIDERATIONS

- A. Ensure proper safety equipment and safety procedures are observed.

II. REFERENCES

- A. ST-23C; JET PUMP OPERABILITY TEST FOR TWO LOOP ST-23C OPERATION (EPIC AVAILABLE), Rev. 19

III. TOOLS AND EQUIPMENT

- A. None

IV. SET UP REQUIREMENTS

- A. Simulator operating at $\geq 25\%$ CTP with 2 recirculation loops in service within 5% speed of each other.
B. Insert Malfunction RR08:X for any jet pump at 100% severity.
C. A partially completed ST-23C filled in with data from Attachment 1
D. Record evaluator mismatch value for step 8.1.3 in JPM step 5

EVALUATOR NOTES

- If performing JPM in the plant, inform the candidate that the conditions of each step need only be properly identified and not actually performed.
 The candidate should, at a minimum, identify the change in equipment status light indication when equipment operation is simulated.

TASK CONDITIONS

- A. Candidate may obtain EPIC data by individual data points or the JPI screen
B. JPM values computed on Jet Pump 5 failure at 100% CTP

- - CRITICAL STEP

INITIATING CUE

You are the SNO. Perform ST-23C; Jet Pump Operability Test for 2 Loop Operation with EPIC Available.

TASK STANDARD

The candidate will perform a Jet Pump Operability determination per ST-23C. During the course of the test, the candidate will experience several pieces of data that will not meet Acceptance Criteria. The final analysis will reveal that the test results are unsatisfactory and that compensatory measures must be initiated.

	STEP	STANDARD	EVALUATION / COMMENT
1.	Obtain a controlled copy of ST-23C	<u>EVALUATOR</u> Hand marked up copy of ST-23C to candidate	SAT / UNSAT
2.	Review procedure	Candidate reviews entire procedure prior to commencing and completes personal data of Attachment 1	SAT / UNSAT
3.	8.1.1 Record the following: A. Total Core Flow (% rated) EPIC-A-3330 B. Loop A Jet Pump Flow Mlbm/hr 02-3FI-92A C. Loop B Jet Pump Flow Mlbm/hr 02-3FI-92B	Candidate obtains the following data from the identified location(s): <ul style="list-style-type: none"> • Total core flow from EPIC (VAV or Log 1 %WT) (~97) • Loop A JP Flow from 09-4 (35) • Loop B JP Flow from 09-4 (40) 	SAT / UNSAT
*4.	8.1.2 Calculate the absolute value of: $ (8.1.1.B) - (8.1.1.C) = \text{Mlbm/hr}$	Candidate computes ~5	SAT / UNSAT

	STEP	STANDARD	EVALUATION / COMMENT
*5.	8.1.3 IF the Total Core Flow (% rated) recorded in Step 8.1.1 is >70%, THEN verify the mismatch in Jet Pump Loop Flows (Step 8.1.2) is <3.85 Mlbm/hr IF the Total Core Flow (% rated) recorded in Step 8.1.1 is <70%, THEN verify the mismatch in Jet Pump Loop Flows (Step 8.1.2) is <7.7 Mlbm/hr	Candidate verifies correct mismatch value of <u> <3.85 </u> Candidate determines mismatch of 5 exceeds allowable of <3.85.	SAT / UNSAT
6.	8.2.1 Record the following: A. A Pump Speed % 02-184SI-16A1 B. B Pump Speed % 02-184SI-16B1 C. A Recirc Loop Flow Mlbm/hr EPIC-A-3317 D. B Recirc Loop Flow Mlbm/hr EPIC-A-3318	Candidate obtains the following data from the identified location(s): <ul style="list-style-type: none"> • A pump speed from 09-4 (89) • B pump speed from 09-4 (90) • A loop flow from EPIC (VAV) (~18.5) • B loop flow from EPIC (VAV) (~17.3) 	SAT / UNSAT
*7.	8.2.2 Verify the following using Attachment 3: A Recirc Loop Flow from Step 8.2.1.C is +/-5% of A Loop Predicted Flow for Pump Speed recorded in Step 8.2.1.A. B Recirc Loop Flow from Step 8.2.1.D is +/-5% of B Loop Predicted Flow for Pump Speed recorded in Step 8.2.1.B.	Candidates determines "NO" for A and "NO" for B <ul style="list-style-type: none"> • A high out of range (15.9-17.57) • B in range (15.54-17.17) 	SAT / UNSAT

	STEP	STANDARD	EVALUATION / COMMENT
8.	8.3.1 Record the following: A. A Recirc Pump Speed % (Step 8.2.1.A) B. B Recirc Pump Speed % (Step 8.2.1.B) C. A Recirc Loop JP Flow Mlbm/hr (Step 8.1.1.B) D. B Recirc Loop JP Flow Mlbm/hr (Step 8.1.1.C)	Candidate obtains the following data from the identified location(s): <ul style="list-style-type: none"> • A pump speed from step 8.2.1 (89) • B pump speed from step 8.2.1 (90) • A loop JP flow from step 8.1.1 (35) • B loop JP flow from step 8.1.1 (40) 	SAT / UNSAT
*9.	8.3.2 Verify the following using Attachment 4: A Recirc Loop JP Flow from Step 8.3.1.C is +/-5% of A Loop JP Predicted Flow for Pump Speed recorded in Step 8.3.1.A. B Recirc Loop JP Flow from Step 8.3.1.D is +/-5% of B Loop JP Predicted Flow for Pump Speed recorded in Step 8.3.1.B.	Candidate determines "NO" for both <ul style="list-style-type: none"> • A low out at 35 • B high out at 40 	SAT / UNSAT
10.	8.4.1 Record the following: A Recirc Loop JP Flow Mlbm/hr (Step 8.3.1.C) B Recirc Loop JP Flow Mlbm/hr (Step 8.3.1.D)	Candidate obtains the following data from the identified location(s): <ul style="list-style-type: none"> • A loop JP flow from step 8.3.1 (35) • B loop JP flow from step 8.3.1 (40) 	SAT / UNSAT
11.	8.4.2 Record diffuser to lower plenum differential pressure for each jet pump using EPIC in the table below: NOTE: EPIC display JPI may be used to obtain all jet pump DPs.	Candidate obtains the following data from the identified location(s): <ul style="list-style-type: none"> • Individual jet pump D/P's from EPIC (VAV or JPI) APPROXIMATE VALUES CONTAINED ON ATTACHED	SAT / UNSAT

	STEP	STANDARD	EVALUATION / COMMENT
12.	8.4.3 Record the +/-20% values of predicted JP dP for the respective Recirc Loop Jet Pump Flow recorded in Step 8.4.1, from Attachment 5. A. A Loop JP dP (-)20% value %psid B. A Loop JP dP (+)20% value %psid C. B Loop JP dP (-)20% value %psid D. B Loop JP dP (+)20% value %psid	A 29.14 B 43.7 C 39.19 D 58.78	SAT / UNSAT
*13.	8.4.4 Verify that each JP dP recorded in Step 8.4.2 is within +/-20% of the predicted JP dP for its respective loop (A or B) as recorded in Step 8.4.3.	Candidate determines that: <ul style="list-style-type: none"> • JP 5 low out of range at ~20% PSID • JP 6 High out of range at ~57% PSID 	SAT / UNSAT
14.	8.5.1 Complete Attachment 2	EVALUATOR Inform candidate that this data is not required	SAT / UNSAT
15.	9.2.1 Independent Verification	EVALUATOR Complete data as if in agreement with candidate performance.	SAT / UNSAT
*16.	11.1.3 IF Level 1 Acceptance Criteria OR Level 2 LLRT valve acceptance criteria was not met, THEN perform the following: A. Sign off ST as unsatisfactory. B. Immediately notify the CRS. C. Initiate a CR. D. If necessary, initiate a PID.	Candidate report to CRS that Level 1 Acceptance criteria has not been met: <ul style="list-style-type: none"> • Step 8.1.3 not met • Step 8.2.2 not met for A • Step 8.3.2 not met for both • Step 8.4.4 not met for JP 5 and 6 	SAT / UNSAT
EVALUATOR: Terminate the task at this point.			

Complete the following ST-23C data entries:

4.0 PREREQUISITES

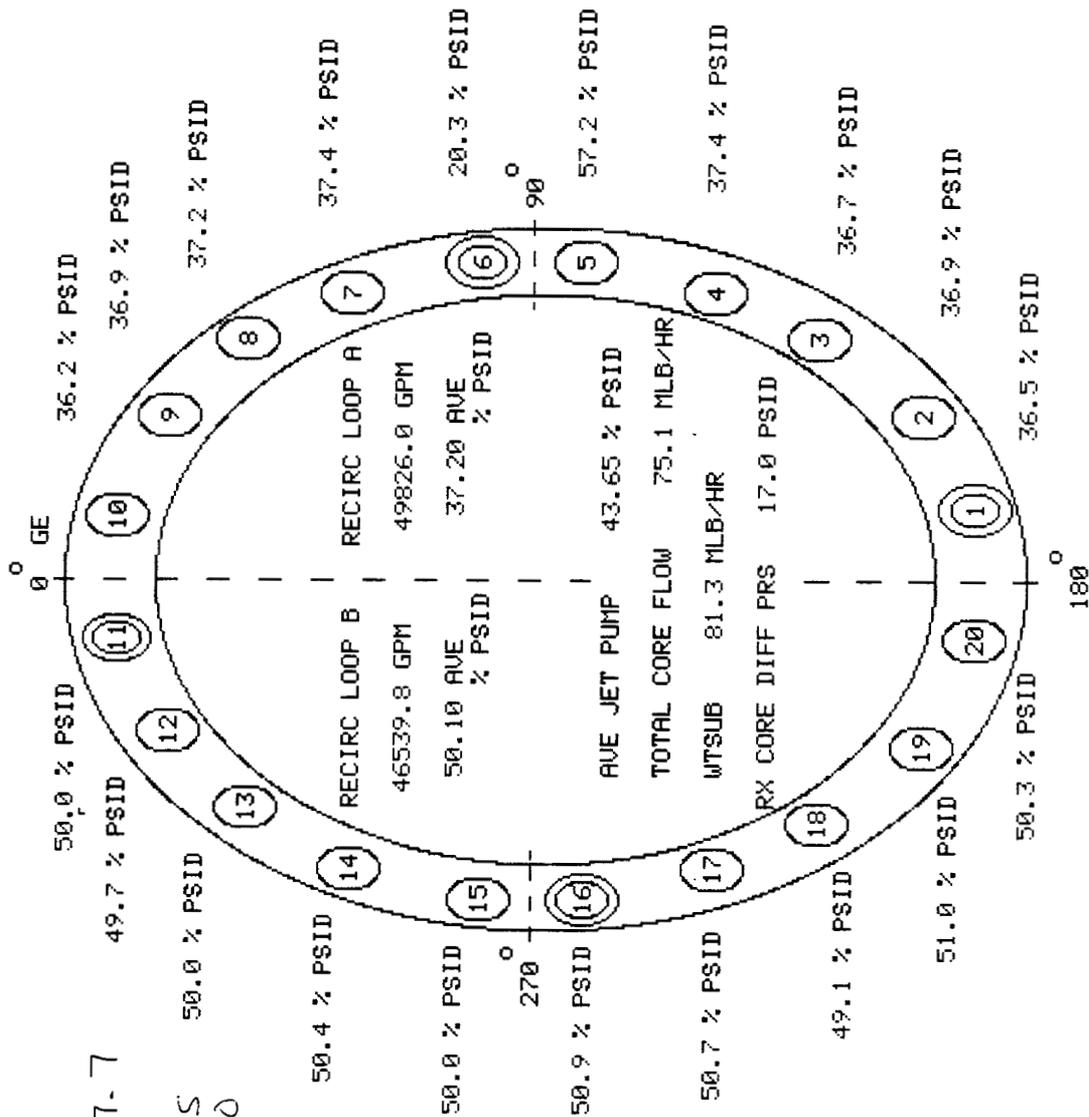
- 4.1 SM has granted permission to perform this test.
- 4.2 Revision Number of this Working Copy is the same as the revision number listed in the Master Copy of the Index of Operations Surveillance Test Procedures.
- 4.3 Test personnel have read this procedure and are thoroughly familiar with its contents.
- 4.4 Start of test recorded. Date/Time
- 4.5 Start of test recorded in SNO Log.
- 4.6 SM determines current status of reactor engineering data:
 - Baseline data for new established pattern.
 - Established pattern exists.
- 4.7 Recirculation pump speeds are within 5%.
- 4.8 EPIC is available.
- 4.9 Calibration for each of the following instruments is up-to-date:
 - EPIC-A-414 (I&C route IC045)
 - EPIC-A-415 (I&C ST schedule status)
 - EPIC-A-416 (I&C ST schedule status)
 - EPIC-A-420 (I&C ST schedule status)
 - EPIC-A-421 (I&C ST schedule status)
 - EPIC-A-942 (I&C route IC039)
 - EPIC-A-943 (I&C route IC039)
 - EPIC-A-944 (I&C route IC039)
 - EPIC-A-945 (I&C route IC039)
 - EPIC-A-946 (I&C route IC039)
 - EPIC-A-947 (I&C route IC039)
 - EPIC-A-948 (I&C route IC039)
 - EPIC-A-949 (I&C route IC039)
 - EPIC-A-950 (I&C route IC039)
 - EPIC-A-951 (I&C route IC039)
 - EPIC-A-952 (I&C route IC039)
 - EPIC-A-953 (I&C route IC039)
 - EPIC-A-954 (I&C route IC039)
 - EPIC-A-955 (I&C route IC039)
 - EPIC-A-956 (I&C route IC039)
 - EPIC-A-957 (I&C route IC039)
 - EPIC-A-958 (I&C route IC039)
 - EPIC-A-959 (I&C route IC039)
 - EPIC-A-960 (I&C route IC039)
 - EPIC-A-961 (I&C route IC039)
 - 02-3FI-92A (I&C route IC045)
 - 02-3FI-92B (I&C route IC045)

Sign off Attachment 1 to ST-23C as person completing the above data entries

11:20:56 07NM-K3/4A-B // 11:20:56 DWSILTEMPRG F

JPI

TOTAL Core Flow
 A-3330 - Log 1 1/2 WT 97.7
 Loop A/B Jet Pump Flow
 02-3FI-92A -09-4 3S
 02-3FI-92B -09-4 40



NOTES: 100 % PSID = 34 PSID
 CALIBRATED JET PUMPS: 1,6,11,16



James A. FitzPatrick Nuclear Power Plant
OPERATIONS TRAINING PROGRAMS
JOB PERFORMANCE MEASURE

S/RO _____ 21201009F TASK TITLE: (F) Reset an RPS Scram with Scram Valve Failure to Close

APPL. TO _____ JPM NUMBER _____

REV: 4 DATE: 5/18/03 NRC K/A SYSTEM NUMBER: 212000 A4.14 3.8/3.8

JAF TASK NUMBER: 2120101009 JAF QUAL STANDARD NUMBER: 5005.104

ESTIMATED COMPLETION TIME: 10 Minutes

SUBMITTED: [Signature] OPERATION REVIEW: [Signature] for Tonbitt

APPROVED: [Signature]

~~~~~  
 CANDIDATE NAME: \_\_\_\_\_ S.S. NUMBER: \_\_\_\_\_

JPM Completion: ( ) Simulated (X) Performed

Location: ( ) Plant (X) Simulator

DATE PERFORMED: \_\_\_\_\_ TIME TO COMPLETE: \_\_\_\_\_ Minutes

PERFORMANCE EVALUATION: ( ) Satisfactory ( ) Unsatisfactory

~~~~~  
 COMMENTS: (MANDATORY FOR UNSATISFACTORY PERFORMANCE)

EVALUATOR: _____
 SIGNATURE/PRINTED

CANDIDATE REVIEW: _____
 SIGNATURE

REVIEWED BY: _____
 PROGRAM ADMINISTER

DOC. COMPLETE: _____

**JOB PERFORMANCE MEASURE
RECORD AND CHECKLIST**

S/RO

21201009F

TASK TITLE: (F) Reset an RPS Scram with Scram Valve Failure
to Close

APPL. TO

JPM NUMBER

Current Update: 5/18/03
Date

By: RWD
Int.

Outstanding Items:

Technical Review

Additional Information

Questions and Answers

Validation

Procedural Change Required

None

Comments:

Simulator validated 5/24/03. IC 134

Previous Revision Dates:

02/10/94

08/29/94

03/06/99

07/25/01

**JOB PERFORMANCE MEASURE
REQUIRED TASK INFORMATION**

S/RO

21201009E

TASK TITLE: (F) Reset an RPS Scram with Scram Valve Failure
to Close

APPL. TO

JPM NUMBER

I. SAFETY CONSIDERATIONS

- A. Ensure proper safety equipment and safety procedures are observed.

II. REFERENCES

- A. AOP-1; REACTOR SCRAM, Rev. 39.

III. TOOLS AND EQUIPMENT

- A. None

IV. SET UP REQUIREMENTS

- A. Initialize the simulator to any full power IC.
- B. Insert a manual scram by placing the Mode Switch to SHUTDOWN.
- C. Reset ARI.
- D. Stabilize RPV level above 177 inches.
- E. Manually override the blue scram lights "ON" for control rods 14-43, 30-19, 06-19, and 42-07 (ZL03AZ5SC-17, 90, 96 and 132).

V. EVALUATOR NOTES

- A. If performing JPM in the plant, inform the candidate that the conditions of each step need only be properly identified and not actually performed.
- B. The candidate should, at a minimum, identify the change in equipment status light indication when equipment operation is simulated.

VI. TASK CONDITIONS

- A. The reactor scrammed while operating at 100% power. The scram condition has been identified and cleared.
- B. All reactor scram signals are now clear with the exception of the scram discharge volume high level signal.
- C. The Shift Manger has directed the reactor scram be reset.

* - CRITICAL STEP

TASK TITLE: (F) Reset an RPS Scram with Scram Valve Failure to Close

VII. INITIATING CUE

Inform the candidate, "The Reactor has scrammed from 100% power. Aop-1 Immediate Operator Actions are complete. The scram condition has been identified and cleared. The Shift Manager has directed you to reset the reactor scram."

TASK STANDARD

The candidate will reset a full scram per AOP-1 C.2.4. During the procedurally required verification that all scram blue lamps are off the candidate will reinsert a manual scram.

	STEP	STANDARD	EVALUATION / COMMENT
1.	Obtain a copy of AOP-1, REACTOR SCRAM	The candidate obtains a copy of AOP-1.	SAT / UNSAT
2.	Select the correct section to perform the task.	The candidate selects Section C.2.4 of AOP-1.	SAT / UNSAT
3.	IF ARI actuated, THEN reset ARI.	The candidate observes that ARI is reset.	SAT / UNSAT
4.	Verify annunciator 09-5-1-33, MODE SW IN SHUTDOWN TRIP BYPASSED is in alarm.	The candidate observes that the annunciator window for annunciator 09-5-1-33 is in alarm.	SAT / UNSAT
*5.	Place the SDIV HI LVL TRIP keylock switch in BYPASS.	The candidate places the SDIV HI LVL TRIP keylock switch in BYPASS.	SAT / UNSAT
*6.	Place RX SCRAM RESET switch to Group 2 & 3, then to 1 & 4, spring return to NORM.	The candidate places the REACTOR SCRAM RESET selector switch, (5A-S5), momentarily to the GP2 and GP3 position, back through "NORM" to the GP1 and GP4 position then back to "NORM".	SAT / UNSAT
7.	Verify RPS A and B SCRAM GROUPS 1, 2, 3 and 4 lights are ON.	The candidate verifies the scram has been reset by ensuring that the following lights are ON: A. RPS A Scram Groups 1, 2, 3 and 4 on Panel 09-5 B. RPS B Scram Groups 1, 2, 3 and 4 on Panel 09-5	SAT / UNSAT

S/RO 21201009F
 TASK TITLE: (F) Reset an RPS Scram with Scram Valve Failure to Close

	STEP	STANDARD	EVALUATION / COMMENT
*8.	Verify closed all scram inlet and outlet valves using one or a combination of the following methods: <ul style="list-style-type: none"> • Blue lights OFF. • Local Valve position indication. 	The candidate recognizes/reports that several control rod scram inlet and outlet valves have failed to close by observing that blue scram lights are ON.	SAT / UNSAT
*9.	IF any scram inlet or outlet valve fails to close, then perform the following: <p>A. Depress the following pushbuttons:</p> <ul style="list-style-type: none"> • MANUAL SCRAM A • MANUAL SCRAM B <p>B) Investigate the cause.</p>	The candidate performs the following: <p>A) Depresses the both manual scram pushbuttons</p> <p>B) Observes the following:</p> <ul style="list-style-type: none"> • Manual scram A, B pushbuttons lights are ON • Annunciators 09-5-1-13, 14; RPS A, B MAN SCRAM, in alarm. • RPS A, B Scram Groups 1,2, 3 and 4 lights are OFF. <p>C) Reports the success of inserting a manual scram.</p>	SAT / UNSAT
EVALUATOR: Terminate the task at this point.			

RO ONLY



James A. FitzPatrick Nuclear Power Plant
OPERATIONS TRAINING PROGRAMS
JOB PERFORMANCE MEASURE

S/RO 26402003B TASK TITLE: EDG Shutdown From Load Test Surveillance (ST-9BA)

APPL. TO JPM NUMBER

REV: 0 DATE: 5/18/03 NRC K/A SYSTEM NUMBER: 264000 A4.04 3.7/3.7

JAF TASK NUMBER: JAF QUAL STANDARD NUMBER:

ESTIMATED COMPLETION TIME: 20 Minutes

SUBMITTED: [Signature] OPERATION REVIEW: [Signature] for Teubitt

APPROVED: [Signature]

CANDIDATE NAME: S.S. NUMBER:

JPM Completion: () Simulated (X) Performed

Location: () Plant (X) Simulator

DATE PERFORMED: TIME TO COMPLETE: _____ Minutes

PERFORMANCE EVALUATION: () Satisfactory () Unsatisfactory

COMMENTS: (MANDATORY FOR UNSATISFACTORY PERFORMANCE)

EVALUATOR: _____
SIGNATURE/PRINTED

CANDIDATE REVIEW: _____
SIGNATURE

REVIEWED BY: _____ PROGRAM ADMINISTER DOC. COMPLETE: _____

JOB PERFORMANCE MEASURE

RECORD AND CHECKLIST

S/RO _____ 26402003B _____ TASK TITLE: EDG Shutdown From Load Test Surveillance (ST-9BA)

APPL. TO _____ JPM NUMBER _____

Current Update: 5/18/03 _____
Date

By: RWD
Int.

Outstanding Items:

- | | |
|---|---|
| <input type="checkbox"/> Technical Review | <input type="checkbox"/> Additional Information |
| <input type="checkbox"/> Questions and Answers | <input type="checkbox"/> Validation |
| <input type="checkbox"/> Procedural Change Required | <input type="checkbox"/> None |

Comments:

Simulator validated 5/24/03. IC-132

Previous Revision Dates:

**JOB PERFORMANCE MEASURE
REQUIRED TASK INFORMATION**

S/RO _____

26402003B _____

TASK TITLE: EDG Shutdown From Load Test Surveillance (ST-9BA)

APPL. TO

JPM NUMBER

I. SAFETY CONSIDERATIONS

- A. Ensure proper safety equipment and safety procedures are observed.

II. REFERENCES

- A. ST-9BA, EDG A AND C FULL LOAD TEST AND ESW PUMP OPERABILITY TEST, Rev 5

III. TOOLS AND EQUIPMENT

- A. None

IV. SET UP REQUIREMENTS

- A. Simulator in any operating condition.
- B. Perform and markup ST-9BA through completion of step 8.35
 - a. Time recorded in 8.17 approx 80 min earlier than expected time for 8.37
 - b. Time recorded in 8.24 approx 65 min earlier than expected time for 8.37
- C. A partially completed ST-9BA filled in with data from Attachment 1

V. EVALUATOR NOTES

- A. If performing JPM in the plant, inform the candidate that the conditions of each step need only be properly identified and not actually performed.
- B. The candidate should, at a minimum, identify the change in equipment status light indication when equipment operation is simulated.

VI. TASK CONDITIONS

- A.
- B.

* - CRITICAL STEP

S/RO 26402003B

TASK TITLE: EDG Shutdown From Load Test Surveillance (ST-9BA)

VII. INITIATING CUE

Continue ST-9BA at step 8.36. A and C EDG's have been running at this KW loading for > 1 hour.

TASK STANDARD

The candidate will adjust EDG A and C voltage and frequency controls to set up for standby operation and shutdown EDG A and C as directed by ST-9BA.

	STEP	STANDARD	EVALUATION / COMMENT
1.	Obtain a controlled copy of ST-9BA	EVALUATOR Hand marked up copy of ST-9BA to candidate	SAT / UNSAT
2.	Review procedure	Candidate reviews entire procedure prior to commencing and completes personal data of Attachment 1	SAT / UNSAT

	STEP	STANDARD	EVALUATION / COMMENT																		
3.	<p>8.36 WHEN EDG A and C have been running fully loaded for at least 40 minutes, perform the following:</p> <p>8.36.1 Not Required</p> <p>8.36.2 Record readings from the following instruments at panel 09-8 and perform Steps 8.36.2.A through 8.36.2.C below:</p> <p>EDG A FREQ EDG A KW EDG A KVAR EDG A KV EDG A PH A EDG A PH B EDG A PH C EDG C FREQ EDG C KW EDG C KVAR EDG C KV EDG C PH A EDG C PH B EDG C PH C</p> <p>A. Verify that each instrument reflects the expected operating value of the measured parameter. B. Verify EDG A and C voltage and frequency indications are consistent with each other. C. Record discrepancies in Subsection 11.4</p>	<p>Candidate obtains the following data from the identified location(s):</p> <p style="text-align: center;">09-8 PANEL</p> <table border="1" data-bbox="817 402 1555 769"> <thead> <tr> <th>PARAMETER</th> <th>A</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>Frequency</td> <td>60</td> <td>60</td> </tr> <tr> <td>Kilowatts</td> <td>~2500</td> <td>~2500</td> </tr> <tr> <td>Kilovars</td> <td>~-180</td> <td>~-180</td> </tr> <tr> <td>Kilovolts</td> <td>~4100</td> <td>~4100</td> </tr> <tr> <td>Phase A/B/C Amperage</td> <td>~350/350/350</td> <td>~350/350/350</td> </tr> </tbody> </table> <p>All are expected and consistent values.</p>	PARAMETER	A	C	Frequency	60	60	Kilowatts	~2500	~2500	Kilovars	~-180	~-180	Kilovolts	~4100	~4100	Phase A/B/C Amperage	~350/350/350	~350/350/350	<p style="text-align: center;">SAT / UNSAT</p>
PARAMETER	A	C																			
Frequency	60	60																			
Kilowatts	~2500	~2500																			
Kilovars	~-180	~-180																			
Kilovolts	~4100	~4100																			
Phase A/B/C Amperage	~350/350/350	~350/350/350																			

	STEP	STANDARD	EVALUATION / COMMENT
4.	<p>8.37 [ITS] WHEN EDG A and C have been running loaded at > 2340 kW and < 2600 kW each for > 60 minutes, perform the following:</p> <p>8.37.1 Record current time in hours and minutes.</p> <p>8.37.2 Verify full load run time is GREATER THAN OR EQUAL TO 60 minutes and record.</p> <p>8.37.3 WHILE performing Steps 8.37.4 through 8.37.7, do not operate the T-4 load tap changer. NR</p>	<p>Candidate determines one-hour time requirement has been satisfied and records data.</p> <p>Candidate observes T-4 tap changer caution.</p>	SAT / UNSAT
*5.	8.37.4 Adjust EDG A GOV to lower EDG A load to approximately 50 kW over 3 to 5 minutes in approximately 800 kW increments.	<p>At 09-8 panel, candidate selects lower on EDG"A" Governor Control Switch</p> <p>EVALUATOR</p> <p>Time compression may be exercised at the completion of each adjustment.</p>	SAT / UNSAT
*6.	8.37.5 Trip EDG A LOAD BKR 10502.	At 09-8 panel, candidate selects 10502 control switch to Trip	SAT / UNSAT
*7.	8.37.6 Adjust EDG C GOV to lower EDG C load to approximately 50 kW over 3 to 5 minutes in approximately 800 kW increments.	<p>At 09-8 panel, candidate selects lower on EDG"C" Governor Control Switch</p> <p>EVALUATOR</p> <p>Time compression may be exercised at the completion of each adjustment.</p>	SAT / UNSAT
*8.	8.37.7 Trip EDG C LOAD BKR 10512.	At 09-8 panel, candidate selects 10512 control switch to Trip	SAT / UNSAT

	STEP	STANDARD	EVALUATION / COMMENT
*9.	8.37.8 Place the following switches in NORMAL: EDG A GOV MODE EDG C GOV MODE	At 09-8 panel, candidate selects A and C EDG GOV MODE switches to NORMAL	SAT / UNSAT
10.	8.38 Prepare EDG A for shutdown as follows:	N/A	SAT / UNSAT
11.	8.38.1 Place EDG A LOAD BKR SYNCH SW in ON.	Candidate selects EDG A LOAD BKR SYNCH SW to ON.	SAT / UNSAT
*12.	8.38.2 Adjust EDG A parameters for shutdown as follows: Adjust EDG A GOV until SYNCHROSCOPE is as close to being stopped as practicable. Adjust EDG A VOLT REG to establish 4.3 kV on EDG A KV meter.	Candidate adjusts EDG A GOV and EDG A VOLT REG to establish desired values	SAT / UNSAT
13.	8.38.3 Verify SYNCHROSCOPE is as close to being stopped as practicable.	Candidate observes synchroscope movement and adjusts EDG A GOV as necessary	SAT / UNSAT
14.	8.38.4 Record voltage from INCOMING volt meter	Candidate records voltage (~124)	SAT / UNSAT
15.	8.38.5 Place EDG A LOAD BKR SYNCH SW in OFF and remove synch switch handle.	Candidate selects EDG A LOAD BKR SYNCH SW to OFF and remove synch switch handle.	SAT / UNSAT
16.	8.39 Prepare EDG C for shutdown as follows:	N/A	SAT / UNSAT
17.	8.39.1 Place EDG C LOAD BKR SYNCH SW in ON.	Candidate selects EDG C LOAD BKR SYNCH SW to ON.	SAT / UNSAT

	STEP	STANDARD	EVALUATION / COMMENT
*18.	8.39.2 Adjust EDG C parameters for shutdown as follows: Adjust EDG C GOV until SYNCHROSCOPE is as close to being stopped as practicable. Adjust EDG C VOLT REG until voltage on INCOMING volt meter is the same as the voltage recorded in Step 8.38.4. (~124)	Candidate adjusts EDG C GOV and EDG C VOLT REG to establish desired values	SAT / UNSAT
19.	8.39.3 Verify SYNCHROSCOPE is as close to being stopped as practicable.	Candidate observes synchroscope movement and adjusts EDG C GOV as necessary	SAT / UNSAT
20.	8.39.4 Record voltage from INCOMING volt meter.	Candidate records voltage (~124)	SAT / UNSAT
21.	8.39.5 Place EDG C LOAD BKR SYNCH SW in OFF and remove synch switch handle.	Candidate selects EDG C LOAD BKR SYNCH SW to OFF and remove synch switch handle.	SAT / UNSAT
22.	COM1.5.2 8.40 Allow EDG A and C to run unloaded for at least 10 minutes to cool down cylinders before proceeding to the next step.	EVALUATOR Time compression may be exercised.	SAT / UNSAT
*23.	8.41 Shut down EDG A and C by placing the following control switches to STOP and record time: EDG A CNTRL EDG C CNTRL	Candidate selects STOP on both EDG CNTRL switches and records time.	SAT / UNSAT
24.	8.42 WHEN EDG A and C are stopped (at standstill), stop ESW PMP A 46P-2A at panel 09-6.	EVALUATOR Time compression may be exercised by stating that both EDG's have come to a complete stop.	SAT / UNSAT
EVALUATOR: Terminate the task at this point.			

S/RO 26402003B

TASK TITLE: EDG Shutdown From Load Test Surveillance (ST-9BA)
ATTACHMENT 1

4.1 SM has granted permission to perform this test.

4.2 Revision Number of this Working Copy is the same as the revision number listed in the Master Copy of the Index of Operations Surveillance Test Procedures.

4.3 Test personnel have read this procedure and are thoroughly familiar with its contents.

4.4 Start of test recorded. Date/Time

4.5 Start of test recorded in SNO Log.

NOTE: Remaining prerequisites may be performed in any order or concurrently.

4.6 Emergency Service Water System is lined up per OP-21, with ESW Pump 46P-2A shutdown.

4.7 Circulating Water System, including traveling water screens and trash rakes, is supplying water to the suction of Emergency Service Water Pumps 46P-2A and 46P-2B per OP-4.

NOTE: The next step may be marked "NA" if Chemistry reports that chlorinating is not required.

4.8 ESW pump forebay chlorinated per OP-7A.

4.9 120V AC Power System is lined up per OP-46B.

4.10 125V DC Power System is lined up per OP-43A.

4.11 Diesel Generator Room Ventilation is lined up per OP-60.

4.12 Pipe and Cable Tunnels Ventilation System is lined up per OP-62.

4.13 EDG A and C are in the standby line up per OP-22.

COM1.5.1

4.14 Pre-startup checks have been completed for EDG A and C per Sect G of OP-22.

4.15 Calibration is up-to-date for each of the following instruments:

Instrument

93AM-21A

93AM-21C

93AM-22A

93AM-22C

93AM-23A

93AM-23C

93FM-2A

93FM-2C

93LI-102A

93LI-102C

93LS-7A

93LS-7C

93LT-102A

93LT-102C

93TI-5A

93TI-5C

93VM-2A

93VM-2C

93VRM-2A

93VRM-2C

93WM-2A

93WM-2C

EPIC-A-710

4.16 Calibration for each instrument listed in Subsection 5.1 is up-to-date.

S/RO 26402003B

TASK TITLE: EDG Shutdown From Load Test Surveillance (ST-9BA)

ATTACHMENT 1 Continued

EXP1.6.3

4.17 **IF** EDG System A is required to be operable, **THEN** EDG System A is declared inoperable per AP-12.08.

4.18 Section 8.4 of ST-9R has been performed within one hour after declaring EDG System A inoperable.

5.0 TEST EQUIPMENT, SPECIAL TOOLS, AND MATERIALS

5.1 Test Equipment

Stopwatch Serial Number

Stopwatch Serial Number

Stopwatch Serial Number

Portable digital thermometer, required accuracy $\pm 1^{\circ}\text{F}$ (required only when outside ambient temperature is $> 88^{\circ}\text{F}$ and screenwell intake temperature is $> 78^{\circ}\text{F}$) Serial Number



Entergy
Nuclear Northeast

James A. FitzPatrick Nuclear Power Plant

**OPERATIONS TRAINING PROGRAMS
JOB PERFORMANCE MEASURE**

S/RO/NLO: 20004234A TASK TITLE: EOP Isolation/Interlock Overrides - Main Turbine Bypass Valves
 APPL. TO: _____ JPM NUMBER: _____
 REV: 8 DATE: 5/20/03 NRC K/A SYSTEM NUMBER: 295037 EK3.06.3.8/4.1
 JAF TASK NUMBER: 2000402234 JAF QUAL STANDARD NUMBER: 5AOP.225
 ESTIMATED COMPLETION TIME: 10 Minutes
 SUBMITTED: [Signature] OPERATION REVIEW: [Signature] for Tunbitt
 APPROVED: [Signature]

CANDIDATE NAME: _____ S.S. NUMBER: _____

JPM Completion: (X) Simulated () Performed

Location: (X) Plant () Simulator

DATE PERFORMED: _____ TIME TO COMPLETE: _____ Minutes

PERFORMANCE EVALUATION: () Satisfactory () Unsatisfactory

COMMENTS: (MANDATORY FOR UNSATISFACTORY PERFORMANCE)

EVALUATOR: _____
SIGNATURE/PRINTED

CANDIDATE REVIEW: _____
SIGNATURE

REVIEWED BY: _____ DOC. COMPLETE: _____
PROGRAM ADMINISTER

JOB PERFORMANCE MEASURE

RECORD AND CHECKLIST

S/RO/NLO 20004234A

TASK TITLE: EOP Isolation/Interlock Overrides - Main Turbine
Bypass Valves

APPL. TO JPM NUMBER

Current Update: 5/20/03
Date

By: RWD
Int.

Outstanding Items:

Technical Review

Additional Information

Questions and Answers

Validation

Procedural Change Required

None

Comments:

Previous Revision Dates:

- 02/06/89
- 03/03/92
- 04/26/93
- 12/02/93
- 09/28/94
- 11/14/96
- 06/19/98
- 05/17/00

**JOB PERFORMANCE MEASURE
REQUIRED TASK INFORMATION**

S/RO/NLO

20004234A

TASK TITLE: EOP Isolation/Interlock Overrides - Main Turbine
Bypass Valves

APPL. TO

JPM NUMBER

I. SAFETY CONSIDERATIONS

- A. Ensure proper safety equipment and safety procedures are observed.

II. REFERENCES

- A. EP-2, Isolation/Interlock Overrides, Rev. 3
- B. EOP-2, RPV Control.
- C. Reference Drawings FE-2T and 2Z.

III. TOOLS AND EQUIPMENT

- A. Jumpers
- B. Screwdriver/Nutdriver

IV. SET UP REQUIREMENTS

- A. Make a copy of EP-2, Isolation/Interlock Overrides, for use by candidate.
- B. Obtain Shift Manager's permission prior to performing this task

V. EVALUATOR NOTES

- A. If performing JPM in the plant, inform the candidate that the conditions of each step need only be properly identified and not actually performed.
- B. The candidate should, at a minimum, identify the change in equipment status light indication when equipment operation is simulated.

VI. TASK CONDITIONS

- A. While operating at full power, an ATWS event occurred, during which the Main Turbine bypass valves closed on low main condenser vacuum.
- B. The isolation signal to close the bypass valves must be overridden to restore the Main Condenser as a heat sink.

* - CRITICAL STEP

VII. INITIATING CUE

"The Main Turbine bypass valves closed on low main condenser vacuum. Per EP-2, override this isolation signal to allow the re-opening of the bypass valves."

TASK STANDARD

The candidate will insert the jumpers into EHC Bay B as directed by EP-2

	STEP	STANDARD	EVALUATION / COMMENT
1.	Obtain a controlled copy of procedure EP-2, Isolation/Interlock Overrides.	Obtains a controlled copy of EP-2, Isolation/Interlock Overrides. EVALUATOR Provide candidate with copy of EP-2	SAT / UNSAT
2.	Select the correct section to perform the task.	Selects section 5.4 of EP-2	SAT / UNSAT
EVALUATOR: Steps 4 and 6 may be performed in any order or concurrently.			
3.	Obtain jumpers	Candidate will proceed to a small aluminum cabinet labeled for EP use. The cabinet is mounted on the East end of the CAD cabinet in the Relay Room Southeast corner. EVALUATOR Do not allow candidate to open cabinet. He need only identify that the jumpers and necessary tools are contained within.	SAT / UNSAT
* 4.	Connect jumper between terminals TBB22-1 and TBB22-2 in Bay B of panel EHC.	EVALUATOR When the candidate identifies the installation site for the jumpers, state "a jumper is installed between terminals TBB22-1 and TBB22-2".	SAT / UNSAT
5.	Initials block associated with installation	Initials step for installation of jumper.	SAT / UNSAT

	STEP	STANDARD	EVALUATION / COMMENT
	of the jumper.		
* 6.	Connect jumper between terminals TBB22-3 and TBB22-4 in Bay B of panel EHC.	<p>EVALUATOR</p> <p>When the candidate identifies the installation site for the jumper, state "a jumper is installed between terminals TBB22-3 and TBB22-4".</p>	SAT / UNSAT
7.	Initial block associated with installation of the jumper.	Initials step for installation of jumper.	SAT / UNSAT
EVALUATOR: Terminate the task at this point.			



James A. FitzPatrick Nuclear Power Plant
OPERATIONS TRAINING PROGRAMS
JOB PERFORMANCE MEASURE

S/RO/NLO 20101014 TASK TITLE: Electrically Disarm a CRD
 APPL. TO JPM NUMBER

REV: 6 DATE: 5/20/03 NRC K/A SYSTEM NUMBER: 201003 A2.02 3.7/3.8

JAF TASK NUMBER: 2010101014 JAF QUAL STANDARD NUMBER: 503C.203

ESTIMATED COMPLETION TIME: 10 Minutes

SUBMITTED: *[Signature]* OPERATION REVIEW: *[Signature]* For Tech. H

APPROVED: *[Signature]*

CANDIDATE NAME: _____ S.S. NUMBER: _____

JPM Completion: (X) Simulated () Performed

Location: (X) Plant () Simulator

DATE PERFORMED: _____ TIME TO COMPLETE: _____ Minutes

PERFORMANCE EVALUATION: () Satisfactory () Unsatisfactory

COMMENTS: (MANDATORY FOR UNSATISFACTORY PERFORMANCE)

EVALUATOR: _____
 SIGNATURE/PRINTED

CANDIDATE REVIEW: _____
 SIGNATURE

REVIEWED BY: _____ DOC. COMPLETE: _____
 PROGRAM ADMINISTER

**JOB PERFORMANCE MEASURE
RECORD AND CHECKLIST**

S/RO/NLO
APPL. TO

20101014
JPM NUMBER

TASK TITLE: Electrically Disarm a CRD

Current Update: 5/20/03
Date

By: RWD
Int.

Outstanding Items:

Technical Review

Additional Information

Questions and Answers

Validation

Procedural Change Required

None

Comments:

Previous Revision Dates:

01/20/89
03/03/92
04/26/93
12/02/93
09/27/94
03/14/00

**JOB PERFORMANCE MEASURE
REQUIRED TASK INFORMATION**

S/RO/NLO
APPL. TO

20101014
JPM NUMBER

TASK TITLE: Electrically Disarm a CRD

I. SAFETY CONSIDERATIONS

- A. Ensure proper safety equipment and safety procedures are observed.

II. REFERENCES

- A. OP-25, CONTROL ROD DRIVE HYDRAULIC SYSTEM, Rev. 70
- B. T/S 3.1.3.C

III. TOOLS AND EQUIPMENT

- A. None

IV. SET UP REQUIREMENTS

- A. None

V. EVALUATOR NOTES

- A. If performing JPM in the plant, inform the candidate that the conditions of each step need only be properly identified and not actually performed.
- B. The candidate should, at a minimum, identify the change in equipment status light indication when equipment operation is simulated.

VI. TASK CONDITIONS

- A. The reactor is at rated power
- B. Control Rod 22-19 was fully withdrawn, but would not couple
- C. The rod has been fully inserted and its HCU is being valved out.
- D. CRD 22-19 must be electrically disarmed as directed by the Shift Manager

*** - CRITICAL STEP**

S/RO/NLO 20101014

TASK TITLE: Electrically Disarm a CRD

VII. INITIATING CUE

"The plant is operating at rated power, steady state. It has been discovered that control rod 22-19 is not coupled. Efforts to recouple the control rod to its drive have been unsuccessful. The control rod has been fully inserted and its HCU is being valved out. The Shift manager has directed you to electrically disarm CRD 22-19."

TASK STANDARD

The candidate will remove the 4 amphenol connectors from the HCU directional control valves as directed by OP-25, Section G.23

	STEP	STANDARD	EVALUATION / COMMENT
1.	Obtain a controlled copy of OP-25, CONTROL ROD DRIVE HYDRAULIC SYSTEM	Obtains a controlled copy of procedure OP-25 EVALUATOR Hand copy of OP-25 to candidate	SAT / UNSAT
2.	Select the correct section to perform the task	Selects Section G.23 of OP-25	SAT / UNSAT
3.	Review the precautions	Reviews the precautions, making note of any that are applicable	SAT / UNSAT
4.	Notify the Control Room that CRD-(*) will be electrically disarmed	Contacts Control Room Operator and informs him that CRD(22-19) will be electrically disarmed EVALUATOR: Role play Control Room Operator and say repeat back CRD(22-19) will be electrically disarmed".	SAT / UNSAT

	STEP	STANDARD	EVALUATION / COMMENT
5.	<p>Unplug amphenol connector from each of the following solenoid operated valves at HCU-() and control per AP-12.06:</p> <ul style="list-style-type: none"> • 03SOV-120(*) (Withdraw settle solenoid operated valve) • 03SOV-121(*) Insert exhaust water solenoid operated valve) • 03SOV-122(*) (Withdraw drive water solenoid operated valve) • 03SOV-123(*) (Insert drive water solenoid operated valve) 	<p>Candidate proceeds to R.B. 272' elevation</p> <ul style="list-style-type: none"> • Select the correct HCU (22-19) • Identify the 4 directional control valve amphenol plugs • Indicate how they would be pulled to electrically disarm the CRD. <p>EVALUATOR: Inform candidate "The amphenol plugs have been disconnected"</p>	SAT / UNSAT
6.	Notify Control Room that CRD-(*) has been electrically disarmed	<p>Contact Control Room Operator and informs him the CRD(22-19) has been electrically disarmed</p> <p>EVALUATOR: Role play Control Room Operator and say "Understand CRD(22-19) has been electrically disarmed".</p>	SAT / UNSAT
EVALUATOR: Terminate the task at this point.			



James A. FitzPatrick Nuclear Power Plant
OPERATIONS TRAINING PROGRAMS
JOB PERFORMANCE MEASURE

S/RO/NLO 20004233A TASK TITLE: Close an SORV Remotely by Pulling Fuses.
APPL. TO JPM NUMBER

REV: 6 DATE: 5/21/03 NRC K/A SYSTEM NUMBER: 239002 A2.03 4.1/4.2

JAF TASK NUMBER: 2000402233 JAF QUAL STANDARD NUMBER: 5AOP.115

ESTIMATED COMPLETION TIME: 10 Minutes

SUBMITTED: [Signature] OPERATION REVIEW: [Signature] for Tonbitt

APPROVED: [Signature]

CANDIDATE NAME: _____ S.S. NUMBER: _____

JPM Completion: (X) Simulated () Performed

Location: (X) Plant () Simulator

DATE PERFORMED: _____ TIME TO COMPLETE: _____ Minutes

PERFORMANCE EVALUATION: () Satisfactory () Unsatisfactory

COMMENTS: (MANDATORY FOR UNSATISFACTORY PERFORMANCE)

EVALUATOR: _____
SIGNATURE/PRINTED

CANDIDATE REVIEW: _____
SIGNATURE

REVIEWED BY: _____ PROGRAM ADMINISTER DOC. COMPLETE: _____

**JOB PERFORMANCE MEASURE
RECORD AND CHECKLIST**

S/RO/NLO
APPL. TO

20004233A
JPM NUMBER

TASK TITLE: Close an SORV Remotely by Pulling Fuses.

Current Update: 5/21/03
Date

By: RWD
Int.

Outstanding Items:

Technical Review

Additional Information

Questions and Answers

Validation

Procedural Change Required

None

Comments:

Previous Revision Dates:

08/90

03/92

03/93

01/94

09/94

11/95

01/01

**JOB PERFORMANCE MEASURE
REQUIRED TASK INFORMATION**

S/RO/NLO
APPL. TO

20004233A
JPM NUMBER

TASK TITLE: Close an SORV Remotely by Pulling Fuses.

I. SAFETY CONSIDERATIONS

- A. Ensure proper safety equipment and safety procedures are observed.

II. REFERENCES

- A. AOP-36, Stuck Open Relief Valve(s), Rev. 13

III. TOOLS AND EQUIPMENT

- A. Fuse Pullers

IV. SET UP REQUIREMENTS

- A. Make a copy of AOP-36 for use by the candidate.
- B. Obtain Shift Manager's permission prior to performing this task.

V. EVALUATOR NOTES

- A. If performing JPM in the plant, inform the candidate that the conditions of each step need only be properly identified and not actually performed.
- B. The candidate should, at a minimum, identify the change in equipment status light indication when equipment operation is simulated.
- C. Place keeping should be demonstrated by the candidate during the performance of the task.

VI. TASK CONDITIONS

- A. .SORV 02-RV-71A inadvertently opened and remained open.
- B. AOP-36, Stuck Open Relief Valves, was entered and attempts to shut the valve from the 09-4 panel have been unsuccessful, steps C.2.1 through C.2.3.c are completed.
- C. The next step to close the valve is to remove the control power fuses per step C.2.3.d

*** - CRITICAL STEP**

TASK TITLE: Close an SORV Remotely by Pulling Fuses.

VII. INITIATING CUE

"Safety Relief Valve 02-RV-71A is stuck open. Control Room actions for closing the valve have been unsuccessful. The Control Room Supervisor directs you to attempt to close 02-RV-71A by removing the four (4) control power fuses per AOP-36".

TASK STANDARD

The candidate will remove the 4 control power fuses for the malfunctioning SRV as directed by AOP-36 Step C.2.3.d

	STEP	STANDARD	EVALUATION / COMMENT
1.	Obtain a controlled copy of procedure AOP-36, Stuck Open SRV(s)	The candidate obtains a controlled copy of AOP-36. EVALUATOR Hand copy of AOP-36 to candidate	SAT / UNSAT
2.	Identify step C.2.3.(d) as appropriate step	Candidate may use C.2.3.d and Attachment 1 or Posted Attachment 1 inside 09-45 as guidance.	SAT / UNSAT
3.	Proceed to panel 09-45 in the Relay Room and access the panel.	Correct panel located and accessed.	SAT / UNSAT
4.	Using either a controlled copy of AOP-36, Stuck Open Relief Valve(s) or the posted attachment inside panel 09-45, determine the correct fuses to be removed.	Fuses F2(F3A), F12(F4A), F23(F11A), and F34(F12A) in panel 09-45 identified for removal.	SAT / UNSAT
*5.	Remove the control power fuses for 02-RV-71A.	EVALUATOR: When the candidate identifies which fuses are to be removed and describes how to remove them using the fuse pullers, tell the candidate "The fuses are pulled".	SAT / UNSAT
6.	Contact the Control Room and inform them that the fuses have been removed.	EVALUATOR: Acknowledge the communication and as the Control Room Operator inform the candidate that "The SRV now indicates closed".	SAT / UNSAT

S/RO/NLO 20004233A

TASK TITLE: Close an SORV Remotely by Pulling Fuses.

STEP	STANDARD	EVALUATION / COMMENT
	EVALUATOR: Terminate the task at this point.	