

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

STATION: HOPE CREEK
SYSTEM: Reactor Core Isolation Cooling (RCIC) System
TASK: Place RCIC In Full Flow Recirc

TASK NUMBER: 2170100201

JPM NUMBER: 305H-JPM.BD-013-00

APPLICABILITY:

EO ☐

RO ☒

SRO ☒

K/A NUMBER: 217000 A4.03

IMPORTANCE FACTOR:

3.4

3.3

RO

SRO

EVALUATION SETTING/METHOD: Simulator / Perform

REFERENCES: HC.OP-SO.BD-0001, Revision 20

TOOLS AND EQUIPMENT: None

VALIDATED JPM COMPLETION TIME: 5 Minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS:

APPROVED:

N/A

PRINCIPAL TRAINING SUPERVISOR

N/A

OPERATIONS MANAGER

CAUTION:

No plant equipment shall be operated during the performance of a JPM without the following:

1. Permission from the OS Or Unit CRS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME:

ACTUAL TIME CRITICAL COMPLETION TIME:

N/A

JPM PERFORMED BY:

GRADE: ☐ SAT ☐ UNSAT

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE:

DATE:

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____

DATE: _____

SYSTEM: Reactor Core Isolation Cooling (RCIC) System

TASK: Place RCIC In Full Flow Recirc

TASK NUMBER: 2170100201

INITIAL CONDITIONS:

1. The Reactor has scrammed due to a loss of all Reactor Feed Pumps.
2. RCIC had been used in Full Flow Recirc and is currently injecting into the RPV to maintain RPV water level.
3. The Condensate System is available for injection.
4. RCIC is required for pressure control.

INITIATING CUE:

Place the RCIC System in Full Flow Recirc.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made (and NRC concurrence is obtained).

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Reactor Core Isolation Cooling (RCIC) System

TASK: Place RCIC In Full Flow Recirc

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Operator obtains/locates procedure HC.OP-SO.BD-0001.	Operator obtains the correct procedure.		
		Operator reviews precautions and limitations.	Operator reviews precautions and limitations. Examiner Cue: If excessive time is taken reviewing precautions and limitations, inform the operator that all are satisfied.		
		Operator determines beginning step of the procedure.	Operator determines correct beginning step to be 5.5.10.		
*	5.5.10	START TIME: _____ To return to Full Flow Recirc, PERFORM the following: A. ENSURE AP-HV-F011 HPCI & RCIC COMMON TEST RETURN ISLN VLV is open.	Completion of Attachment #1 is not required for satisfactory step completion. Operator ensures AP-HV-F011 HPCI & RCIC COMMON TEST RETURN ISLN VLV is open.		
*		B. CLOSE BD-HV-F013 RCIC FW ISLN MOV AND INITIAL Attachment 1.	Operator closes BD-HV-F013 RCIC FW ISLN MOV and initials Attachment 1.		
		C. ENSURE BD-SV-F019/SV-4405 RCIC MIN FLOW RECIRC VLVS open.	Operator ensures BD-SV-F019/SV-4405 RCIC MIN FLOW RECIRC VLVS open. Examiner Note: BD-SV-F019/SV-4405 RCIC MIN FLOW RECIRC VLVS may not open depending on the response time of BD-HV-F022. Note 5.5.10.C.		
#		D. WHEN BD-HV-F013 RCIC FW ISLN MOV fully closes, IMMEDIATELY OPEN BD-HV-F022 RCIC TEST BYP TO CST MOV.	When BD-HV-F013 RCIC FW ISLN MOV fully closes, the operator immediately opens BD-HV-F022 RCIC TEST BYP TO CST MOV.		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Reactor Core Isolation Cooling (RCIC) System
TASK: Place RCIC In Full Flow Recirc

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		E. ENSURE BD-SV-F019/SV-4405 RCIC MIN FLOW RECIRC VLVS close.	The operator ensures BD-SV-F019/SV-4405 RCIC MIN FLOW RECIRC VLVS close. (If open.)		
		F. MONITOR the following - RCIC flow - RPV water level and pressure - Condensate Storage Tank Level - Suppression Pool Level, and Temperature	Operator monitors: - RCIC flow - RPV water level and pressure - Condensate Storage Tank Level - Suppression Pool Level, and Temperature		
	5.5.11	PERFORM independent verification that the system is aligned IAW Attachment 1. STOP TIME: _____			

Terminating Cue: Repeat back message from the operator on the status of RCIC, or the request for a second verification, and then state, "This JPM is complete."

JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

- 1. The Reactor has scrammed due to a loss of all Reactor Feed Pumps.**
- 2. RCIC had been used in Full Flow Recirc and is currently injecting into the RPV to maintain RPV water level.**
- 3. The Condensate System is available for injection.**
- 4. RCIC is required for pressure control.**

INITIATING CUE:

Place the RCIC System in Full Flow Recirc.

JOB PERFORMANCE MEASURE SIMULATOR INSTRUCTIONS

Reset Simulator to IC-01 or comparable IC.

Scram the plant.

Control vessel level at approximately -35 inches.

Trip all RFPs.

Line up RCIC (F011 open) up to step 5.5.9 of BD-0001.

Remove HPCI from service if it starts.

Lower Reactor pressure with BPVs to approximately 600 psig.

Stabilize RPV water Level.

Ensure RCIC controller set at 600 gpm.

Complete Attachment 1 up to step 5.5.9.

Place the simulator in FREEZE.

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

STATION: HOPE CREEK

SYSTEM: High Pressure Coolant Injection

TASK: Manually Start the HPCI (High Pressure Coolant Injection) System

TASK NUMBER: 2060040101

JPM NUMBER: 305H-JPM.BJ-002-06

APPLICABILITY:

EO ☐

RO ☒

SRO ☒

K/A NUMBER:	206000	2.11
IMPORTANCE FACTOR:	4.1	4.2
	RO	SRO

EVALUATION SETTING/METHOD: Simulator / Perform

REFERENCES: HC.OP-SO.BJ-0001, Rev. 20

TOOLS AND EQUIPMENT: None

VALIDATED JPM COMPLETION TIME: 15 min.

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

APPROVED: N/A
PRINCIPAL TRAINING SUPERVISOR

N/A
OPERATIONS MANAGER

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:

1. Permission from the SNSS Or Unit NSS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME: _____

ACTUAL TIME CRITICAL COMPLETION TIME: N/A

JPM PERFORMED BY: _____

GRADE: ☐ SAT ☐ UNSAT

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: _____

DATE: _____

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____

DATE: _____

SYSTEM: High Pressure Coolant Injection (HPCI)

TASK: Manually Start the High Pressure Coolant Injection System

TASK NUMBER: 2060040101

INITIAL CONDITIONS:

1. A loss of Main Condenser vacuum has occurred due to a ruptured Main Turbine exhaust boot.
2. The Reactor has scrammed.
3. The MSIVs are closed.
4. Reactor Water Level is between level 3 and level 2.
5. RCIC is out of service for maintenance

INITIATING CUE:

Manually initiate HPCI, restore and maintain RPV water level between 12.5 and 54 inches.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made (and NRC concurrence is obtained).

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: High Pressure Coolant Injection (HPCI)

TASK: Manually Start the High Pressure Coolant Injection System

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT Evaluation)
		Operator obtains / locates procedure HC.OP-SO.BJ-0001.	Operator obtains the correct procedure.		
		Operator reviews precautions and limitations.	Operator reviews precautions and limitations. Examiner Cue: If excessive time is taken reviewing precautions and limitations, inform operator that all are satisfied.		
		Operator determines beginning step in procedure.	Operator determines correct beginning step to be 5.5.		
	5.5.1	ENSURE all Prerequisites have been satisfied IAW Section 2.5 of this procedure.	Operator ensures that all prerequisites have been satisfied. Examiner Cue: If excessive time is taken reviewing prerequisites, inform operator that all are satisfied.		

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: High Pressure Coolant Injection (HPCI)

TASK: Manually Start the High Pressure Coolant Injection System

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT Evaluation)
	5.5.2	START TIME: _____ ARM AND DEPRESS HPCI MAN INIT PB AND OBSERVE proper system operation IAW Section 5.4 of this procedure.	Operator arms and depresses the HPCI Manual Initiation Pb and recognizes the failure of HPCI to start. Examiner Cue: If operator reports the failure of the HPCI MAN INIT PB to the NSS, issue the following order, "Manually start the HPCI System."		
	5.5.3	IF System initiation does NOT occur, THEN MANUALLY START the system as follows:		N/A	N/A
	5.5.3.A	ENSURE HV-F008 TEST BYP TO CST ISLN MOV is closed.	Operator observes HV-F008 is closed by observing the CLSD indicator is illuminated and the OPEN indicator is extinguished.		
	5.5.3.B	START OP216 VAC TK VACUUM PUMP.	Operator depresses OP216 START pushbutton and observes that the RUNNING indicator illuminates, and the STOPPED indicator extinguishes.		
*	5.5.3.C	OPEN HV-F059 LUB OIL CLG WTR ISLN MOV.	Operator depresses the HV-F059 OPEN Pb and observes that the OPEN indicator illuminates and the CLSD indicator extinguishes.		

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: High Pressure Coolant Injection (HPCI)

TASK: Manually Start the High Pressure Coolant Injection System

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT Evaluation)
*	5.5.3.D	<u>SIMULTANEOUSLY</u> PERFORM the following steps: 1. START AUXILIARY OIL PUMP <u>AND OPEN</u> FD-HV-F001 TURB STM SUP MOV.	Operator depresses the Aux Oil Pump START Pb and observes the Running indicator is illuminated and the STOPPED indicator is extinguished. The operator depresses the HV-F001 OPEN Pb and observes that the OPEN indicator illuminates and the CLSD indicator extinguishes.		
*		2. OPEN HV-F006 PMP DSCH INBD ISLN MOV.	Operator depresses the HV-F006 OPEN Pb and observes that the OPEN indicator illuminates and the CLSD indicator extinguishes.		
*		3. OPEN HV-F8278 (HV-F105) PMP DSCH TO FW ISLN MOV.	Operator depresses the HV-8278 (HV-F105) open Pb and observes that the OPEN indicator illuminates and the CLSD indicator extinguishes.		
	5.5.4	OBSERVE HPCI Pump starts by observing the following indications: • PI-R601-E41 PUMP DISCH PRESS • SI-4919 TURBINE SPEED	Operator observes the pump starts by observing increasing pump discharge pressure on PI-R601-E41. Operator observes the pump starts by observing increasing speed on Si-4919.		

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: High Pressure Coolant Injection (HPCI)

TASK: Manually Start the High Pressure Coolant Injection System

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT Evaluation)
	5.5.5	<p><u>IF</u> open, <u>THEN</u> OBSERVE the following valves close:</p> <p>A. FD-HV-F025 VAC TANK LVL VLV</p> <p>B. FD-HV-F026 CNDS PMP DRAIN VLV</p> <p>C. FD-HV-F028 STM TRAP ISLN VLV</p> <p>D. FD-HV-F029 STM TRAP ISLN VLV</p>	<p>Examiner Note: Operator may restore level and secure HPCI before observing all listed indications. As necessary, use follow-up questions for clarification.</p> <p>The operator observes that the CLOSED indicators are illuminated and the OPEN indicators are extinguished for the following valves:</p> <p>A. FD-HV-F025</p> <p>B. FD-HV-F026</p> <p>C. FD-HV-F028</p> <p>D. FD-HV-F029</p>		
	5.5.6	CLOSE FD-HV-4922 VAC PMP TO MN COND.	Operator observes FD-HV-4922 is closed by observing that the CLSD indicator is illuminated and the OPEN indicator is extinguished.		

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

NAME: _____

DATE: _____

SYSTEM: High Pressure Coolant Injection (HPCI)

TASK: Manually Start the High Pressure Coolant Injection System

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT Evaluation)
*	5.5.7	OBSERVE the HPCI System is operating properly by observing the following: A. PI-R603-E41 TURB EXH PRESS is < 50 psig. B. PI-R606-E41 PUMP SUC PRESS is > 15" Hg. C. SI-4919 TURBINE SPEED is between 2150-4150 rpm. D. FIC-R600 HPCI FLOW is 5600 gpm E. HV-F012 MIN FLOW BYP MOV opens <u>WHEN</u> HPCI Pump discharge pressure > 125 psig <u>AND</u> flow is < 550 gpm.	Operator observes the following: A. Exhaust Pressure < 50 psig on PI-R603 B. Suction Pressure > 15" Hg on PI-R606 C. Speed between 2150-4150 RPM on SI-4919 Examiner Note: Sustained HPCI operation at speeds < 2150 or > 4500 RPM may cause equipment damage and should be evaluated as unsatisfactory performance of a critical step. D. Flow is 5600 gpm on FIC-R600 E. Min Flow Valve indicates CLSD with discharge pressure on PI-R601 > 125 psig and flow on FIC-R600 > 550 gpm.		
	5.5.8	IF desired, THEN ADJUST FIC-R600 HPCI FLOW SETPOINT to the desired flow to control HPCI Pump flow manually. [CD-249X] STOP TIME: _____	Operator adjusts HPCI flow by depressing the RAISE and / or LOWER STPT as necessary to maintain RPV Level in the designated range of 12.5 to 54 inches.		

Terminating Cue: Repeat back message from the operator on the status of the HPCI system and then state "This JPM is complete."

JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

- 1. A loss of Main Condenser vacuum has occurred due to a ruptured Main Turbine exhaust boot.**
- 2. The reactor has scrammed.**
- 3. The MSIVs are closed.**
- 4. Reactor Water Level is between level 3 and level 2.**
- 5. RCIC is out of service for maintenance.**

INITIATING CUE:

Manually initiate HPCI, restore and maintain RPV water level between 12.5 and 54 inches.

JOB PERFORMANCE MEASURE SIMULATOR INSTRUCTIONS

Reset Simulator to IC-01 or comparable IC.

Isolate and tag RCIC.

Scram the plant.

Control level between -38 and 0 inches. (As low as possible, -30" - -34")

Trip all Reactor Feed Pumps.

When RPV pressure is stabilized, close the MSIVs and break Main Condenser Vacuum.

Control RPV pressure with SRVs.

Ensure HPCI did not inject, and reset any initiation signals present.

Insert IO Override 9S124A – OFF- OVDI HPCI MAN INIT – DA.

Place the simulator in FREEZE.

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

STATION: HOPE CREEK
SYSTEM: Main Turbine
TASK: Roll The Main Turbine To Rated Speed

TASK NUMBER: 2450100101

JPM NUMBER: 305H-JPM.AC-007-00

APPLICABILITY:

EO

☐

RO

☒

SRO

☒

K/A NUMBER: 241000 A3.18
IMPORTANCE FACTOR:

3.0	3.0
RO	SRO

EVALUATION SETTING/METHOD: Simulator/Perform

REFERENCES: HC.OP-SO.AC-0001, REV. 29

TOOLS AND EQUIPMENT: None

VALIDATED JPM COMPLETION TIME: 5 min.

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

APPROVED: N/A
PRINCIPAL TRAINING SUPERVISOR

N/A
OPERATIONS MANAGER

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:

1. Permission from the SNSS Or Unit NSS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME:

ACTUAL TIME CRITICAL COMPLETION TIME: N/A

JPM PERFORMED BY:

GRADE: ☐ SAT ☐ UNSAT

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE:

DATE:

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____

DATE: _____

SYSTEM: Main Turbine

TASK: Roll The Main Turbine To Rated Speed

TASK NUMBER: 2450100101

INITIAL CONDITIONS:

1. The plant is operating at 22% power. A Reactor startup is in progress
2. Preparations are complete to roll the main turbine. HC.OP-SO.AC-0001 completed through step 5.4.9.
3. Step 5.4.10.D will not be completed. 1500 rpm checks are not desired.

INITIATING CUE:

Roll the Main Turbine.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made (and NRC concurrence is obtained).

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Main Turbine

TASK: Roll The Main Turbine To Rated Speed

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Operator obtains procedure HC.OP-SO.AC-0001	Operator obtains correct procedure.		
		Operator reviews precautions and limitations	Operator reviews precautions and limitations Examiner Cue: If excessive time is taken reviewing precautions and limitations, inform operator that all are satisfied.		
		Operator determines beginning step of the procedure	Operator determines correct beginning step to be 5.4.10.		
		Operator reviews prerequisites IAW Section 2.4 Completes Attachment #1 section 2.0	Operator ensures prerequisites have been satisfied. Examiner Cue: If excessive time is taken reviewing prerequisites, inform operator that all are satisfied. Completion of Attachment #1 is not required for satisfactory completion of step		
	5.4.10	ROLL the Main Turbine as follows while observing the parameters <u>AND</u> operational requirements listed in Attachment 1:	Operator reviews Attachment 1.		
	5.4.10.A	START TIME: _____ <u>PRIOR</u> to selecting SPEED SET RPM-100 RPM PB, VERIFY the following: 1. All CV's, IV's, and MSV's are closed.	Operator verifies that all CV's, IV's, and MSV's are closed.		
		2. Valves are properly positioned per Attachment 7.	Operator verifies the valves listed in Attachment 7 are positioned properly for a TURB RESET.		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Main Turbine

TASK: Roll The Main Turbine To Rated Speed

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		3. Servo currents for CV's and IV's 1, 3, and 5 are negative (<-20 ma DC), and MSV-2 servo current is slightly negative.	Operator verifies servo currents for CV's and IV's 1, 3, and 5 are negative (<-20 ma DC), and MSV-2 servo current is slightly negative.		
		4. LOAD LIMITING lamp is extinguished.	Operator verifies the LOAD LIMITING lamp is extinguished.		
		5. Annunciator D3-D5, EHC Panel 10C363 is extinguished.	Operator verifies Annunciator D3-D5, EHC Panel 10C363 is extinguished.		
*	5.4.10.B	PRESS SPEED SET RPM-100 PB AND OBSERVE the following: <ul style="list-style-type: none"> MSV #2 opens immediately AND WHEN MSV #2 is full open, MSV #1, #3 and #4 open slowly. IV #1, #3, and #5 opens slowly AND WHEN IV #1, #3, and #5 are full open, IV #4, #2 and #6 respectively open. SPEED INCREASING is ON as the Turbine accelerates. Turbine rolls off of turning gear (TURNING GEAR-ENGAGED is OFF). <p>STOP TIME: _____</p>	<p>Operator presses the SPEED SET RPM-100 PB while observing the following:</p> <p>Operator observes an abnormal valve response, that Turbine speed increases rapidly past the 100 rpm hold point. The operator immediately trips the Main Turbine, and informs the CRS. (CAUTION 5.4.10.B)</p>		

Terminating Cue: Repeat back message from the operator on the status of the Main Turbine, then state, "This JPM is complete."

need a max limit for cases for failure

JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

- 1. The plant is operating at 22% power. A Reactor startup is in progress**
- 2. Preparations are complete to roll the main turbine. HC.OP-SO.AC-0001 completed through step 5.4.9.**
- 3. Step 5.4.10.D will not be completed. 1500 rpm checks are not desired.**

INITIATING CUE:

Roll the Main Turbine.

JOB PERFORMANCE MEASURE SIMULATOR INSTRUCTIONS

Reset simulator to IC-08.

Verify HC.OP-AC-0001 complete through step 5.4.10.

Select MEDIUM start up rate at the EHC control panel.

Insert Malfunction and Event Trigger:

MALFUNCTIONS:

	Malfunction #	Severity	RT#/ET#	Delay	Ramp	Description
___ 1.	TC09		None/1	125		MAIN TURBINE ACCELERATION CONTROL FAILS
___ 2.						

EVENT TRIGGERS

- ___ 1. ZDTCNSET(2) // 100 Speed push button depressed
- ___ 2.

I/O OVERRIDES:

	Singer ID#	Value	RT/ET	Delay	Ramp	Description
___ 1.	2A3-S25	ON	NONE/1	125		OVLO SPEED SET RPM-100
___ 2.	2A3-S37	OFF	NONE/1	125		OVLO SPEED SET RPM-1800
___ 3.	2A3-S37	ON	NONE/1	125		OVDI SPEED SET RPM-1800
___ 4.						
___ 5.						

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

STATION: HOPE CREEK
SYSTEM: Control Rod Drive System
TASK: Respond To A Loss Of CRD Regulating Function

TASK NUMBER: 4000060401

JPM NUMBER: 305H-JPM.BF-012-00

APPLICABILITY:

EO ☐ RO ☒ SRO ☒

K/A NUMBER: 295022 AK3.01
IMPORTANCE FACTOR:

3.7	3.9
RO	SRO

EVALUATION SETTING/METHOD: Simulator/Perform

REFERENCES: HC.OP-SO.SF-0001, REV. 9
HC.OP-AB.ZZ-0105, REV. 6

TOOLS AND EQUIPMENT: None

VALIDATED JPM COMPLETION TIME: 6 Minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

APPROVED:

N/A	N/A
PRINCIPAL TRAINING SUPERVISOR	OPERATIONS MANAGER

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:
1. Permission from the SNSS Or Unit NSS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME: _____

ACTUAL TIME CRITICAL COMPLETION TIME: N/A

JPM PERFORMED BY: _____ GRADE: ☐ SAT ☐ UNSAT

REASON, IF UNSATISFACTORY: _____

EVALUATOR'S SIGNATURE: _____ DATE: _____

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____

DATE: _____

SYSTEM: Control Rod Drive System

TASK: Respond To A Loss Of CRD Regulating Function

TASK NUMBER: 4000060401

INITIAL CONDITIONS:

1. Reactor pressure is approximately 500 psig.
2. A Reactor startup is in progress in accordance with HC.OP-IO.ZZ-0003. Completed up to step 5.3.24.A.
3. Currently at step 252 of the Rod Pull Listing.

INITIATING CUE:

Withdraw control rods to open #1 Turbine Bypass Valve in preparation to place the first RFP in service.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made (and NRC concurrence is obtained).

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Control Rod Drive System

TASK: Respond To A Loss Of CRD Regulating Function

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Operator obtains procedure HC.OP-SO.SF-0001	Operator obtains correct procedure.		
		Operator reviews precautions and limitations	Operator reviews precautions and limitations Examiner Cue: If excessive time is taken reviewing precautions and limitations, inform operator that all are satisfied.		
		Operator determines beginning step of the procedure	Operator determines correct beginning step to be 5.3.1.		
	5.3.1	ENSURE that all prerequisites have been satisfied IAW Section 2.3.	Operator ensures prerequisites have been satisfied. Examiner Cue: If excessive time is taken reviewing prerequisites, inform operator that all are satisfied.		
	5.3.2	START TIME: _____ To select the desired control rod, PRESS the desired control rod select PB on the ROD SELECT MODULE AND OBSERVE the following: A. Selected rod PB comes ON (bright white). B. CONTROL ROD POSITION FOUR ROD DISPLAY indicates the control rod position (10C650C). C. The associated Full Core Display (white) numbered rod identification light comes ON (10C650C).	The operator selects rod 26-43 by pressing rod 26-43's rod select PB on the ROD SELECT MODULE AND observes the following: A. Selected rod PB comes ON (bright white). B. CONTROL ROD POSITION FOUR ROD DISPLAY indicates the control rod position (10C650C). C. The associated Full Core Display (white) numbered rod identification light comes ON (10C650C).		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Control Rod Drive System

TASK: Respond To A Loss Of CRD Regulating Function

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
	5.3.3	<p>At the ROD SELECT MODULE, MOMENTARILY PRESS the WITHDRAW PB AND OBSERVE the following:</p> <p>A. The INSERT (white) light comes ON momentarily.</p> <p>B. The WITHDRAW (white) light comes ON for ≈ 1 second.</p> <p>C. CONTROL ROD POSITION FOUR ROD DISPLAY indicates control rod movement.</p> <p>D. The Full Core Display FULL IN (green) light goes OUT, as applicable.</p> <p>E. The WITHDRAW (white) light goes OUT.</p> <p>F. The SETTLE (white) light comes ON for ≈ 6 seconds, <u>THEN</u> goes OUT.</p> <p>G. CONTROL ROD POSITION FOUR ROD DISPLAY indicates the control rod has settled to the desired position.</p> <p>H. For control rods withdrawn to position 48 (full out), the applicable Full Core Display FULL OUT (red) light comes ON.</p>	<p>The operator presses WITHDRAW PB and observes the following:</p> <p>A. The INSERT (white) light comes ON momentarily.</p> <p>B. The WITHDRAW (white) light comes ON for ≈ 1 second.</p> <p>C. CONTROL ROD POSITION FOUR ROD DISPLAY indicates control rod movement.</p> <p>D. The Full Core Display FULL IN (green) light goes OUT, as applicable.</p> <p>E. The WITHDRAW (white) light goes OUT.</p> <p>F. The SETTLE (white) light comes ON for ≈ 6 seconds, <u>THEN</u> goes OUT.</p> <p>G. CONTROL ROD POSITION FOUR ROD DISPLAY indicates the control rod has settled to the desired position.</p>		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Control Rod Drive System

TASK: Respond To A Loss Of CRD Regulating Function

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
			<p>Operator observes that the operating CRD Pump has tripped by observing the following alarms and indications:</p> <ul style="list-style-type: none"> • Annunciator CRD SYSTEM TROUBLE, C6-F2 is energized. • Lowering CRD Drive Water Flow • Lowering Charging Water Header Pressure • Flashing STOP PB for the operating CRD pump. • D2244 CRD WTR PMP A MOT MALF CRIDS alarm point in alarm. <p>The operator reports these indications to the CRS.</p> <p>The operator may request permission to place the B CRD pump in service.</p> <p>Examiner Cue: Place the B CRD pump in service. (If asked.)</p> <p>The operator attempts to place the B CRD pump in service in accordance with D2244, HC.OP-AR.ZZ-0011, OR Section 5.2.7 of HC.OP-SO.BF-0001.</p> <p>Examiner's Note: The B CRD pump will trip if started.</p>		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Control Rod Drive System

TASK: Respond To A Loss Of CRD Regulating Function

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*		<p>EXAMINER NOTE: If the operator requests that the Reactor Building Equipment Operator to report the local Accumulator pressures for the associated rods, report that indicated pressure for all three is approximately 600 psig.</p> <p>EXAMINER NOTE: The Immediate Action of HC.OP-AB.ZZ-0105 is: <u>IF</u> reactor pressure is <900 psig <u>AND</u> charging water header pressure <940 psig <u>AND</u> <u>one or more</u> control rod scram accumulators are inoperable for <u>WITHDRAWN</u> control rods <u>THEN PLACE</u> the Reactor Mode Switch in SHUTDOWN</p>	<p>The operator observes the following alarm and indications and reports these to the CRS:</p> <ul style="list-style-type: none"> Annunciator CRD ACCUM TROUBLE is energized. ACCUM warning lights are illuminated on the Full Core Display for 3 control rods. <p>The operator determines that at least one of the Accumulator alarms is on a rod that is not full in and reports this to the CRS.</p> <p>The operator recognizes Symptoms for HC.OP-AB.ZZ-0105, LOSS OF CRD REGULATING FUNCTION and performs the IMMEDIATE OPERATOR ACTIONS.</p>		
*	3.1	<p>IF reactor pressure is <900 psig AND charging water header pressure is <940 psig AND one or more control rod scram accumulators are inoperable for WITHDRAWN control rods THEN PLACE the Reactor Mode Switch in SHUTDOWN [TS 3.1.3.5.a.3]</p>	<p>Operator determines that:</p> <ul style="list-style-type: none"> Reactor pressure is <900 psig, Charging water header pressure is <940 psig, And that there is at least one accumulator alarm for a WITHDRAWN control rod by observing rod position and energized ACCUM alarm lights on the Full Core Display, <p>Then places the Reactor Mode Switch in SHUTDOWN</p>		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Control Rod Drive System

TASK: Respond To A Loss Of CRD Regulating Function

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		STOP TIME: _____	Operator reports the status of the Reactor Mode Switch and continues with normal actions for a reactor scram.		

Terminating Cue: Repeat back message from the operator on the status of the Reactor Mode Switch(Scram), then state, "This JPM is complete."

**JOB PERFORMANCE MEASURE
SIMULATOR INSTRUCTIONS**

INITIAL CONDITIONS:

- 1. Reactor pressure is approximately 500 psig.**
- 2. A Reactor startup is in progress in accordance with HC.OP-IO.ZZ-0003. Completed up to step 5.3.24.A.**
- 3. Currently at step 252 of the Rod Pull Listing.**

INITIATING CUE:

Withdraw control rods to open #1 Turbine Bypass Valve in preparation to place the first RFP in service.

JOB PERFORMANCE MEASURE SIMULATOR INSTRUCTIONS

Reset simulator to IC-10.

Select the rod associated with step 252 on the select matrix. Initial the Rod Pull Listing up through step 252.

Start the B SCP.

Insert Malfunctions and Event Trigger: (Pick at least 2 Control Rods out.)

MALFUNCTIONS					
	Malfunction #	Severity	RT#/ET#	Delay	Ramp Description
___ 1.	CD10A		None/1	15	CRD PUMP FAILURE
___ 2.	CD051839		None/1	25	ACCUMULATOR TROUBLE
___ 3.	CD052251		None/1	35	ACCUMULATOR TROUBLE
___ 4.	CD054619		None/1	45	ACCUMULATOR TROUBLE
___ 5.	CD10B		None/2		CRD PUMP B FAILURE

EVENT TRIGGERS	
___ 1.	ZLLCWHIT(049) // 34-19 Select light
___ 2.	ZDLCPBSS // B CRD Pump START PB Depressed
___ 3.	

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

STATION: HOPE CREEK
SYSTEM: Hydrogen / Oxygen Analyzer System
TASK: Place An H₂O₂ Analyzer In Service (Post-LOCA)

TASK NUMBER: 2290060101

JPM NUMBER: 305H-JPM.GS-006-05

APPLICABILITY:

EO ☐

RO ☒

SRO ☒

K/A NUMBER: 223001 A4.04/A4.05

IMPORTANCE FACTOR: 3.5 / 3.6 3.6 / 3.6

RO

SRO

EVALUATION SETTING/METHOD: Simulator / Perform

REFERENCES: HC.OP-SO.GS-0002, Revision 8

TOOLS AND EQUIPMENT: None

VALIDATED JPM COMPLETION TIME: 9 minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

APPROVED: N/A

PRINCIPAL TRAINING SUPERVISOR

N/A

OPERATIONS MANAGER

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:

1. Permission from the OS Or Unit CRS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME: _____

ACTUAL TIME CRITICAL COMPLETION TIME: N/A

JPM PERFORMED BY: _____ GRADE: ☐ SAT ☐ UNSAT

REASON, IF UNSATISFACTORY: _____

EVALUATOR'S SIGNATURE: _____ DATE: _____

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____

DATE: _____

SYSTEM: Hydrogen / Oxygen Analyzer System

TASK: Place An H₂O₂ Analyzer Inservice (Post-LOCA)

TASK NUMBER: 2290060101

INITIAL CONDITIONS:

1. A LOCA has occurred and the primary containment has isolated.
2. The "A" and "B" H₂O₂ Analyzers are in standby.

INITIATING CUE:

Place "A" H₂O₂ Analyzer (1AC200) in service to sample the drywell dome.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made (and NRC concurrence is obtained).

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Hydrogen / Oxygen Analyzer System
TASK: Place An H₂O₂ Analyzer Inservice (Post-LOCA)

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Operator obtains \ locates procedure HC.OP-SO.GS-0002.	Operator obtains the correct procedure.		
		Operator reviews precautions and limitations.	Operator reviews precautions and limitations. EXAMINER CUE: If excessive time is taken reviewing precautions and limitations, inform operator that all are satisfied.		
	5.2	Operator determines beginning step of the procedure	Operator determines correct beginning step to be 5.2.		
	5.2.1	Ensure that prerequisites have been satisfied IAW Section 2.2.	Operator ensures that all prerequisites are satisfied. EXAMINER CUE: If excessive time is taken reviewing prerequisites, inform operator that all are satisfied.		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Hydrogen / Oxygen Analyzer System
TASK: Place An H₂O₂ Analyzer Inservice (Post-LOCA)

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
# *	5.2.2	START TIME: _____ IF Containment isolation has occurred, PERFORM the following: A. PRESS the ISLN OVRD PB for inboard isolation valves for H ₂ O ₂ analyzers 1AC200 <u>AND</u> 1BC200. B. PRESS the ISLN OVRD PB for outboard isolation valves for H ₂ O ₂ analyzers 1AC200 <u>AND</u> 1BC200.	Operator depresses the ISLN OVRD Pushbuttons for the Inboard isolation valves for the "A" and "B" H ₂ O ₂ Analyzers, and observes the amber "OVERRIDDEN" indicators illuminate. Operator depresses the ISLN OVRD Pushbuttons for the outboard isolation valves for the "A" and "B" H ₂ O ₂ analyzers, and observes the amber "OVERRIDDEN" illuminate.		
	5.2.3 & 5.2.4	(Aligns the Supplementary Oxygen Analyzers to sample the Drywell and Suppression Chamber.)	EXAMINER CUE: Inform the operator that the Supplementary Analyzers are not required to be placed in service and steps 5.2.3 and 5.2.4 may be omitted.		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Hydrogen / Oxygen Analyzer System
TASK: Place An H₂O₂ Analyzer Inservice (Post-LOCA)

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	5.2.5	<p>To align the Hydrogen/Oxygen (H₂O₂) Analyzer 1AC200 to sample the Primary Containment, PERFORM the following:</p> <p>A. OPEN one (1) of the following H₂O₂ Analyzer 1AC200 suction valve combinations, RECORD component on Attachment 1 AND INITIAL:</p> <ol style="list-style-type: none"> 1. HV-4955A AND HV-4983A H₂O₂ ANLZR DRYW DOME SUCT. 2. HV-5019A AND HV-4984A H₂O₂ ANLZR DRYW SUCT. 3. HV-4959A AND HV-4965A H₂O₂ ANLZR SUPP CHAMBER SUCT. 	Operator depresses the OPEN Pushbuttons for HV-4955A and HV-4983A Drywell Dome Suction valves, and observes the CLOSE indicators extinguish and the OPEN indicators illuminate.		
*		<p>B. OPEN HV-4966A AND HV-5022A H₂O₂ ANLZR RET AND INITIAL Attachment 1.</p>	Operator depresses the OPEN pushbuttons for HV-4966A and HV-5022A Analyzer Return Valves, and observes the CLOSE indicators extinguish and the OPEN indicators illuminate.		
*		<p>C. VERIFY HV-5741A H₂O₂ ANLZR H₂ SUP HDR is OPEN AND INITIAL Attachment 1</p>	Operator verifies HV-5741A H ₂ O ₂ Analyzer OPEN indication is illuminated.		
*		<p>D. VERIFY the FUNCTION SELECTOR Switch for H₂O₂ Analyzer 1AC200 is in SAMPLE AND INITIAL Attachment 1.</p>	Operator verifies the Analyzer Function Switch is in SAMPLE.		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Hydrogen / Oxygen Analyzer System
TASK: Place An H₂O₂ Analyzer Inservice (Post-LOCA)

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*		E. PLACE the MODE switch for H ₂ O ₂ Analyzer 1AC200 to ANALYZE AND INITIAL Attachment 1.	Operator places the Analyzer Mode Switch to the Analyze position and observes the O ₂ indicator start to come on scale.		
		F. ENSURE the CONTROL AT THIS PNL light is on. <u>IF</u> not, PRESS REMOTE SELECTOR PB.	Operator ensures CONTROL AT THIS PNL indicator illuminated and if not illuminated depresses REMOTE SELECTOR PB. EXAMINER NOTE: Per procedural caution 5.2.5.B, the analyzer should be allowed to operate for 90 minutes (when changing from STANDBY to ANALYZE) to obtain a representation sample.		
	5.2.6	To align H ₂ O ₂ Analyzer 1BC200 to sample the Primary Containment...	EXAMINER NOTE: Per the initiating cue, this step is not applicable.		
	5.2.7	Sample Time from any one location takes approximately ten (10) minutes. STOP TIME: _____	EXAMINER CUE: Inform operator that waiting for the warm-up and sample time periods are not required. Provide Terminating Cue.		

Terminating Cue: Repeat back message from the operator on the status of the "A" H₂O₂ Analyzer and then state "This JPM is complete."

JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

1. A LOCA has occurred and the primary containment has isolated.
2. The "A" and "B" H₂O₂ Analyzers are in standby.

INITIATING CUE:

Place "A" H₂O₂ Analyzer (1AC200) in service to sample the drywell dome.

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

STATION: HOPE CREEK
SYSTEM: Reactor Protection System
TASK: Reset a RPS Scram

TASK NUMBER: 2120030101

JPM NUMBER: 305H-JPM.SB-010-00

APPLICABILITY:

EO ☐ RO ☒ SRO ☒

K/A NUMBER: 212000 A 4.14
IMPORTANCE FACTOR:

3.8	3.8
RO	SRO

EVALUATION SETTING/METHOD: Simulator/Perform

REFERENCES: HC.OP-SO.SB-0001(Q) Revision 15

TOOLS AND EQUIPMENT: OD-3 Control Rod Position

VALIDATED JPM COMPLETION TIME: 12 Min.

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

APPROVED:

N/A	N/A
PRINCIPAL TRAINING SUPERVISOR	OPERATIONS MANAGER

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:
1. Permission from the OS Or Unit CRS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME: _____

ACTUAL TIME CRITICAL COMPLETION TIME: N/A

JPM PERFORMED BY: _____ GRADE: ☐ SAT ☐ UNSAT

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: _____ DATE: _____

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____

DATE: _____

SYSTEM: Reactor Protection System

TASK: Reset A RPS Scram

TASK 2120030101

INITIAL

1. Reactor is shutdown following a scram.
2. The scram initiating signal is clear.
3. ARI/RRCS has not initiated.

INITIATING CUE:

Complete Section 5.6, Resetting RPS Trips, of HC.OP-SO.SB-0001.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made (and NRC concurrence is obtained).

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Reactor Protection System
TASK: Reset A RPS Scram

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Operator obtains/locates procedure HC.OP-SO.SB-0001.	Operator obtains the correct procedure.		
		Operator reviews precautions and limitations	Operator reviews precautions and limitations. Examiner Cue: If excessive time is taken reviewing precautions and limitations, inform operator that all are satisfied.		
		Operator determines beginning step of the procedure.	Operator determines correct beginning step to be 5.3.		
	5.3.1	ENSURE all prerequisites of Section 2.3 are satisfied.	Operator ensures all prerequisites have been satisfied IAW section 2.3 of HC.OP-SO.SB-0001. Examiner Cue: If excessive time is taken reviewing prerequisites, inform operator that all are satisfied.		
	5.3.6	START TIME: _____ IF a Full Scram has occurred, THEN PERFORM the following:	Examiner Note: Procedural Steps 5.3.2 through 5.3.5 are not required to be performed.		
#*		A. ENSURE the RPS MODE SWITCH is in SHUTDOWN OR REFUEL.	Operator verifies the RPS Mode Switch is in the SHUTDOWN or REFUEL position.		
#*		B. INSERT KEY AND PLACE CRD DISCH VOLUME BYP in BYPASSED AND OBSERVE the DISCH VOL HI WTR LEVEL TRIP BYP annunciator is illuminated.	Operator places SCRAM DISCHARGE VOLUME HIGH LEVEL SCRAM BYPASS switch (10C651C) in BYPASS. Operator observes and acknowledges annunciator C5-C4, DISCH VOL HI WTR LVL TRIP BYP.		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Reactor Protection System

TASK: Reset A RPS Scram

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		C. RESET the Rod Drift alarm, if possible.	Operator depresses the Rod Drift Alarm reset pushbutton, and verifies the Rod Drift overhead alarm is clear. Examiner Note: Unable to reset the drift alarms due to the rods at over travel in position.		
		D. PERFORM the following to reset the Scram Reset Switches:	Examiner Note: Initialing Attachment 1 in the following steps is not to be considered critical.	N/A	N/A
*		1. INSERT Key AND TURN RPS TRIP SYSTEM A TRIP LOGIC A1 to RESET AND RETURN to NORM. AND INITIAL Attachment #1	Operator places RPS TRIP SYSTEM A, TRIP LOGIC A1 RESET SWITCH to RESET; Then releases switch (Spring Return to NORM)		
*		2. INSERT Key AND TURN RPS TRIP SYSTEM B TRIP LOGIC A2 to RESET AND RETURN to NORM. AND INITIAL Attachment #1	Operator places RPS TRIP SYSTEM A, TRIP LOGIC A2 RESET switch to RESET; then releases switch (Spring Return to NORM).		
*		3. INSERT Key AND TURN RPS TRIP SYSTEM C TRIP LOGIC B1 to RESET AND RETURN to NORM. AND INITIAL Attachment #1	Operator places RPS TRIP SYSTEM B, TRIP LOGIC B1 RESET SWITCH to RESET; then releases switch (Spring Return to NORM).		
*		4. INSERT Key AND TURN RPS TRIP SYSTEM D TRIP LOGIC B2 to RESET AND RETURN to NORM. AND INITIAL Attachment #1	Operator places RPS TRIP SYSTEM B, TRIP LOGIC B2 RESET SWITCH to RESET; then releases switch (Spring Return to NORM).		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Reactor Protection System

TASK: Reset A RPS Scram

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		E. ENSURE the TRIP LOGIC A1, A2, B1, AND B2 NORMAL/RESET lights are illuminated.	Operator verifies the TRIP LOGIC A1, A2, B1, and B2 NORMAL/RESET indicators illuminated.		
		F. ENSURE PILOT SCRAM VALVE SOLENOID TRIP ACTUATOR LOGICS A NORMAL AND B NORMAL lights are illuminated (Four Control Rod Groups).	Operator verifies the PILOT SCRAM VALVE SOLENOID TRIP ACTUATOR LOGICS "LOGIC A NORMAL" and "LOGIC B NORMAL" indicators are illuminated for group 1,2,3 and 4 solenoids.		
		G. ENSURE the SCRAM DISCHARGE VOLUME PIPING INBD/OUTBD VENT VALVE HVF010/HVF180 AND INBD/OUTBD DRAIN VALVE HVF011/HVF181 OPEN is illuminated.	Operator verifies SCRAM DISCHARGE VOLUME INBD/OUTBD VENT VALVES HVF010/HVF180 and INBD/OUTBD DRAIN VALVES HVF011/HVF181 OPEN indicators are illuminated.		
		H. ENSURE blue SCRAM lights are extinguished for all 185 Control Rods on Full CORE DISPLAY (10C650C).	Operator observes blue SCRAM lights on the FULL CORE DISPLAY (10C650C) ARE ILLUMINATED (>5 CONTROL RODS).		
		I. ENSURE the following annunciators are de-energized: <ul style="list-style-type: none"> • REACTOR SCRAM TRIP LOGIC A1 • REACTOR SCRAM TRIP LOGIC A2 • REACTOR SCRAM TRIP LOGIC B1 • REACTOR SCRAM TRIP LOGIC B2 	Operator observes the following annunciators are de-energized: <ul style="list-style-type: none"> • REACTOR SCRAM TRIP LOGIC A1 • REACTOR SCRAM TRIP LOGIC A2 • REACTOR SCRAM TRIP LOGIC B1 • REACTOR SCRAM TRIP LOGIC B2 		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Reactor Protection System
TASK: Reset A RPS Scram

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		J. <u>WHEN</u> the CRD SCRAM DISCH VOL LVL HI annunciator is de-energized, <u>THEN INSERT</u> Key <u>AND PLACE</u> CRD DISCH VOLUME BYP in NORMAL (DISCH VOL HI WTR LEVEL TRIP BYP annunciator is de-energized) <u>AND INITIAL</u> Attachment 1.	Operator observes that the CRD SCRAM DISCH VOL LVL HI annunciator is de-energized, then inserts Key and places CRD DISCH VOLUME BYP in NORMAL, DISCH VOL HI WTR LEVEL TRIP BYP annunciator is de-energized, and initials Attachment 1. Examiner Note: May have the simulator operator reduce the SDV level such that the time until draining is complete is shortened.		
*		K. <u>AFTER</u> resetting the Scram <u>THEN PERFORM</u> the following as soon as possible: 1. VERIFY all control rods have settled into notch "00" using the FOUR ROD DISPLAY <u>OR</u> the Process Computer. Process computer may need OD-3 EDIT run for a scram.	Operator verifies all control rods have settled into notch "00" using the FOUR ROD DISPLAY or the Process Computer. The operator runs an OD-3 EDIT if necessary. Examiner Cue: Provide the operator with the prepared OD-3. The operator observes that all rods have not resealed and informs the CRS. Examiner Cue: Acknowledge the report from the operator, and direct the operator to reseal the Control Rod.		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

SYSTEM: Reactor Protection System
TASK: Reset A RPS Scram

NAME: _____
DATE: _____

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*		2. RESEAT Control Rods to "00" by applying a rod insert signal. STOP Time: _____	The operator applies an insert signal to the Control Rod that is at the overtravel position, notices it reseats to position "00", and informs the CRS that all rods are reseated.		

Terminating Cue: Repeat back message from the operator on the status of RPS, then state, "This JPM is complete."

JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

- 1. Reactor is shutdown following a scram.**
- 2. The scram initiating signal is clear.**
- 3. ARI/RRCS has not initiated.**

INITIATING CUE:

Complete Section 5.6, Resetting RPS Trips, of HC.OP-SO.SB-0001.

JOB PERFORMANCE MEASURE

Reset simulator to IC-10 or any low power IC.

Scram the reactor and take immediate operator actions.

Insert Malfunction and Event Trigger:

MALFUNCTIONS

	Malfunction #	Severity	RT#/ET#	Delay	Ramp	Description
___ 1.	CD014207		Pre-insert	5		CONTROL ROD 42-07 DRIFTS IN
___ 2.						

EVENT TRIGGERS

- ___ 1. ZCLCINSE < 1 // INSERT push button depressed
Command: DMF CD011835

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

STATION: HOPE CREEK
SYSTEM: Filtration, Recirculation and Ventilation System (FRVS)
TASK: Remove FRVS From Service

TASK NUMBER: 2610040101

JPM NUMBER: 305H-JPM.GU-006-00

APPLICABILITY:

EO ☐ RO ☒ SRO ☒

K/A NUMBER: 261000 A2.10

IMPORTANCE FACTOR:	
3.1	3.2
RO	SRO

EVALUATION SETTING/METHOD: Simulator / Perform

REFERENCES: HC.OP-SO.GU-0001, Revision 16

TOOLS AND EQUIPMENT: None

VALIDATED JPM COMPLETION TIME: 5 minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

APPROVED: N/A
PRINCIPAL TRAINING SUPERVISOR

N/A
OPERATIONS MANAGER

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:

1. Permission from the OS Or Unit CRS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME: _____

ACTUAL TIME CRITICAL COMPLETION TIME: N/A

JPM PERFORMED BY: _____

GRADE: ☐ SAT ☐ UNSAT

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: _____

DATE: _____

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____

DATE: _____

SYSTEM: Filtration, Recirculation and Ventilation System (FRVS)

TASK: Remove FRVS From Service

TASK NUMBER: 2610040101

INITIAL CONDITIONS:

1. The plant was operating at 100% power when a Reactor scram occurred.
2. Reactor Vessel Water Level dropped to Level 2 (-38 inches) and has been restored to 12.5-54 inches.
3. Primary Containment Isolation System (PCIS) has been reset.
4. Radiation Protection has been notified that FRVS is being removed from service.

INITIATING CUE:

Remove FRVS from service.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made (and NRC concurrence is obtained).

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Filtration, Recirculation and Ventilation System (FRVS)

TASK: Remove FRVS From Service

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Operator obtains/locates procedure HC.OP-SO.GU-0001.	Operator obtains the correct procedure.		
		Operator reviews precautions and limitations.	Operator reviews precautions and limitations. EXAMINER CUE: If excessive time is taken reviewing precautions and limitations, inform operator that all are satisfied.		
		Operator determines beginning step of the procedure.	Operator determines correct beginning step to be 5.4		
	5.4.1	ENSURE that all Prerequisites have been satisfied IAW Section 2.4.	Operator ensures all prerequisites have been satisfied. EXAMINER CUE: If excessive time is taken reviewing prerequisites, inform operator that all are satisfied.		
	5.4.2	START TIME: _____ REMOVE running FRVS RECIRC FANS from service as follows:	Examiner Note: Initialing Attachment 1or the procedure in the following steps is not considered critical. EXAMINER CUE: If requested, inform operator that FRVS operability requirements of Technical Specifications 3.6.5.3 are satisfied.		
		A. IF restoring from an AUTO START: 1. MOMENTARILY PRESS the STOP PB for: • EV213 FRVS RECIRC FAN • FV213 FRVS RECIRC FAN	Operator depresses the STOP PB for: • EV213 FRVS RECIRC FAN • FV213 FRVS RECIRC FAN Examiner Note: EV213 and FV213 are already secured.		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Filtration, Recirculation and Ventilation System (FRVS)

TASK: Remove FRVS From Service

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		2. PRESS the AUTO/LOCKOUT PB to select Lockout for: <ul style="list-style-type: none"> • EV213 FRVS RECIRC FAN • FV213 FRVS RECIRC FAN 	Operator depresses the AUTO/LOCKOUT PB to select Lockout for: <ul style="list-style-type: none"> • EV213 FRVS RECIRC FAN • FV213 FRVS RECIRC FAN 		
*		B. MOMENTARILY PRESS the STOP PB for each FRVS Recirc Fan in service.	Operator depresses STOP PB. for FRVS fans A(B,C,D) V213 observes the STOP indicator illuminates and the START indicator extinguishes for each fan.		
		C. ENSURE that each fan has stopped by monitoring associated fan flow recorder FR-9377A(B,C,D,E,F)	Operator observes that flow recorders FR-9377 A(B,C,D) (10C650E) indicate zero CFM for each of the stopped fans.		
		D. ENSURE that each of the stopped fans is in AUTO.	Operator observes the AUTO indicator for A(B,C,D) V213 is illuminated.		
*		E. PRESS the AUTO/LOCKOUT PB to select Auto for the follow <u>AND</u> INITIAL Attachment 1: <ul style="list-style-type: none"> • EV213 FRVS RECIRC FAN • FV213 FRVS RECIRC FAN 	Operator depresses/observes the AUTO/LOCKOUT PB for EV213 and FV213 FRVS RECIRC FANS and verifies the fans are in Auto.		
	5.4.3	REMOVE the FRVS Vent Fan from service as follows:		N/A	N/A
*		A. <u>IF</u> restoring the FRVS Vent Fan following an AUTO start, PERFORM the following: 1. MOMENTARILY PRESS the MAN PB for the standby FRVS Vent Fan.	Operator momentarily depresses the MAN PB for the BV206 FRVS Vent Fan.		
		2. MOMENTARILY PRESS the AUTO PB for the standby FRVS Vent Fan.	Operator momentarily depresses the AUTO PB for the BV206 FRVS Vent Fan.		
*		B. MOMENTARILY PRESS the STOP PB for the running FRVS Vent Fan.	Operator depresses the STOP PB for AV206 and observes STOP indicator illuminates and RUNNING indicator extinguishes.		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Filtration, Recirculation and Ventilation System (FRVS)

TASK: Remove FRVS From Service

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		C. ENSURE that the fan has stopped by monitoring the associated fan flow recorder FR-9426A(B).	Operator observes that fan flow on recorder FR-9426A (10C650E) indicates zero CFM.		
		D. RESTORE to automatic lineup as follows: 1. PRESS the (AV206/BV206) AUTO LEAD PB for the fan to be the lead <u>AND</u> INITIAL Attachment 1.	EXAMINER CUE: Inform operator that AV206 is to be the lead unit. Operator depresses AUTO LEAD PB for AV206.		
		2. PRESS the (AV206/BV206) AUTO PB for the fan to be in standby <u>AND</u> INITIAL Attachment 1. STOP TIME: _____	Operator depresses AUTO PB for BV206.		

Terminating Cue: Repeat back message from the operator on the status of the FRVS, then state, "This JPM is complete."

JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

- 1. The plant was operating at 100% power when a Reactor scram occurred.**
- 2. Reactor Vessel Water Level dropped to Level 2 (-38 inches) and has been restored to 12.5-54 inches.**
- 3. Primary Containment Isolation System (PCIS) has been reset.**
- 4. Radiation Protection has been notified that FRVS is being removed from service.**

INITIATING CUE:

Remove FRVS from service.

**JOB PERFORMANCE MEASURE
SIMULATOR INSTRUCTIONS**

Trip all RFPs.

Take scram actions.

Ensure level drops below -38 inches.

Control RPV water level. (Might reduce pressure to approx. 600 psig and line up condensate to feed.)

Secure/Control HPCI/RCIC. Maintain water level 12.5-54 inches.

Ensure FRVS auto starts.

Secure EV213 and FV213 in accordance with Section 5.2 of HC.OP-SO.GU-0001.

Reset PCIS.

FREEZE the simulator.

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

STATION: HOPE CREEK
SYSTEM: Control Rod Drive
TASK: Shift In-Service CRD Stabilizing Valves

TASK NUMBER: 2010090104R

JPM NUMBER: 305H-JPM.BF-002-08

APPLICABILITY:

EO ☒ RO ☒ SRO ☒

K/A NUMBER: 201001A2.02
IMPORTANCE FACTOR:

3.2	3.3
RO	SRO

EVALUATION SETTING/METHOD: Reactor Building/Simulate

REFERENCES: HC.OP-SO.BF-0001, REV. 18

TOOLS AND EQUIPMENT: None

VALIDATED JPM COMPLETION TIME: 3 min

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

APPROVED: N/A
PRINCIPAL TRAINING SUPERVISOR

N/A
OPERATIONS MANAGER

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:

1. Permission from the SNSS Or Unit NSS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME: _____

ACTUAL TIME CRITICAL COMPLETION TIME: N/A

JPM PERFORMED BY: _____ GRADE: ☐ SAT ☐ UNSAT

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: _____ DATE: _____

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____

DATE: _____

SYSTEM: Control Rod Drive

TASK: Shift In-Service CRD Stabilizing Valves

TASK NUMBER: 2640180104A

INITIAL CONDITIONS:

1. The plant is operating at 80% power.
2. The "A" CRD Stabilizing Valves are in service.
3. The "A" CRD Stabilizing Valves have failed closed due to a malfunction in the Reactor Manual Control System.

INITIATING CUE:

Place "B" CRD Stabilizing valves in service; secure "A" CRD stabilizing valves.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made (and NRC concurrence is obtained).

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Control Rod Drive
TASK: Shift In-Service CRD Stabilizing Valves

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Operator obtains procedure HC.OP-SO.BF-0001	Operator obtains correct procedure.		
		Operator reviews precautions and limitations	Operator reviews precautions and limitations Examiner Cue: If excessive time is taken reviewing precautions and limitations, inform operator that all are satisfied.		
		Operator determines beginning step of the procedure	Operator determines correct beginning step to be 5.2.5.		
		Operator reviews prerequisites IAW Section 2.2 Completes Attachment #1 section 2.0	Operator ensures prerequisites have been satisfied. Examiner Cue: If excessive time is taken reviewing prerequisites, inform operator that all are satisfied. Completion of Attachment #1 is not required for satisfactory completion of step		
	5.2.5	<u>IF</u> Stabilizing Valve B(A) is to be alternated, THEN PERFORM the following:	N/A	N/A	N/A
*	5.2.5.A	START TIME: _____ Slowly OPEN 1-BF-V054(1-BF-V071), CRD Drive Wtr Stabilizing Vlvs "B(A)" Inlet Vlv <u>AND</u> INITIAL Attachment 1.	Examiner Note: This task is performed at the CRD Flow Control Station, Rx Bldg. Elev 102'. Initialing Attachment 1 is not critical in this and subsequent steps. Operator slowly opens 1-BF-V054, and then initials Att. 1. Examiner Cue: The valve indicated is open.		
*	5.2.5.B	Slowly OPEN 1-BF-V060(1-BF-V059), CRD Drive Wtr Stabilizing Vlvs "B(A)" Outlet Vlv <u>AND</u> INITIAL Attachment 1.	Operator slowly opens 1-BF-V060, and then initials Att. 1. Examiner Cue: The valve indicated is open.		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Control Rod Drive

TASK: Shift In-Service CRD Stabilizing Valves

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	5.2.5.C	PRESS (STABILIZER VALVES) VALVE SELECTOR <u>AND VERIFY</u> that B(A) VALVE SELECTED is illuminated. (10C651C)	Operator contacts control room and requests that the NCO depress the stabilizer valve selector Pb. and then check that the 'B' valves selected indicator is illuminated and the 'A' valves selected indicator is extinguished. Examiner Cue: As the Control Room NCO, state that 'B' stabilizing valves are selected the 'B' valves selected indicator is illuminated, and the 'A' valves selected indicator is extinguished".		
	5.2.5.D	CLOSE 1-BF-V059(1-BF-V060), CRD Drive Wtr Stabilizing Vlv "A(B)" Outlet Vlv <u>AND</u> INITIAL Attachment 1.	Operator closes 1-BF-V059, and then initials Att. 1. Examiner Cue: The valve indicated is closed.		
	5.2.5.E	CLOSE 1-BF-V071(1-BF-V054), CRD Drive Wtr Stabilizing Vlv "A(B)" Inlet Vlv <u>AND</u> INITIAL Attachment 1. STOP TIME: _____	Operator closes 1-BF-V071, and then initials Att. 1. Examiner Cue: The valve indicated is closed.		

Terminating Cue: Repeat back message from the operator on the status of the Stabilizing Valves, then state, "This JPM is complete."

JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

- 1. The plant is operating at 80% power.**
- 2. The "A" CRD Stabilizing Valves are in service.**
- 3. The "A" CRD Stabilizing Valves have failed closed due to a malfunction in the Reactor Manual Control System.**

INITIATING CUE:

Place "B" CRD Stabilizing valves in service; secure "A" CRD stabilizing valves.

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

STATION: HOPE CREEK
SYSTEM: Reactor Manual Control
TASK: Bypass A Control Rod in the Reactor Manual Control System

TASK NUMBER: 2140310101

JPM NUMBER: 305H-JPM.SF-004-11

APPLICABILITY:

EO ☐ RO ☒ SRO ☒

K/A NUMBER:	201002 A2.04
IMPORTANCE FACTOR:	3.2 3.1
	RO SRO

EVALUATION SETTING/METHOD: Auxiliary Building / Walkthrough

REFERENCES: HC.OP-SO.SF-0001, Revision 9

TOOLS AND EQUIPMENT: None

VALIDATED JPM COMPLETION TIME: 7 minutes

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS:

APPROVED: N/A
PRINCIPAL TRAINING SUPERVISOR

N/A
OPERATIONS MANAGER

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:

1. Permission from the OS Or Unit CRS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME:

ACTUAL TIME CRITICAL COMPLETION TIME: N/A

JPM PERFORMED BY: GRADE: ☐ SAT ☐ UNSAT

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: **DATE:**

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____

DATE: _____

SYSTEM: Reactor Manual Control

TASK: Bypass a Control Rod in the Reactor Manual Control System

TASK NUMBER: 2140310101

INITIAL CONDITIONS:

The transponder card for Control Rod 46-07 has failed producing a RDCS fault.

INITIATING CUE:

Bypass Rod 46-07 in the Reactor Manual Control System.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made (and NRC concurrence is obtained).

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Reactor Manual Control
TASK: Bypass a Control Rod in the Reactor Manual Control System

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Operator obtains/locates procedure HC.OP-SO.SF-0001.	Operator obtains the correct procedure.		
		Operator reviews precautions and limitations.	Operator reviews precautions and limitations. Examiner Cue: If excessive time is taken reviewing precautions and limitations, inform operator that all are satisfied.		
		Operator determines beginning step of the procedure.	Operator determines correct beginning step to be 5.7.		
	5.7.1	START TIME: _____ NOTIFY OS/CRS of impending rod bypass.	Operator notifies OS/CRS that Rod 46-07 is to be bypassed. Examiner Cue: As OS/CRS, acknowledge that Rod 46-07 is to be BYPASSED.		
# *	5.7.2	DETERMINE Binary Code for rod to be bypassed from XX-YY coordinates on the FAULT LOCATION MAP. (Attachment 3 or 10C616)	Operator identifies the correct Binary Code for Rod 46-07 from the XX-YY coordinates on the Fault Location Map. <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> 46 $X_4 = 0$ $X_3 = 1$ $X_2 = 1$ $X_1 = 0$ $X_0 = 1$ </div> <div style="text-align: center;"> 07 $Y_4 = 0$ $Y_3 = 0$ $Y_2 = 0$ $Y_1 = 1$ $Y_0 = 1$ </div> </div> (10C616)		

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____

DATE: _____

SYSTEM: Reactor Manual Control

TASK: Bypass a Control Rod in the Reactor Manual Control System

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)												
# *	5.7.3	SET Binary code on BYPASSED ROD IDENTITY toggles for rod to be bypassed. (10C616).	<p>Operator inserts the correct binary code using the BYPASSED ROD IDENTITY toggles as follows:</p> <p>(10C616)</p> <p>Examiner Note: The UP position on the toggle represents (1), the DOWN position represents (0).</p> <table><tr><td>46</td><td>07</td></tr><tr><td>X₄ = 0</td><td>Y₄ = 0</td></tr><tr><td>X₃ = 1</td><td>Y₃ = 0</td></tr><tr><td>X₂ = 1</td><td>Y₂ = 0</td></tr><tr><td>X₁ = 0</td><td>Y₁ = 1</td></tr><tr><td>X₀ = 1</td><td>Y₀ = 1</td></tr></table> <p>Examiner Cue: The indicated toggles are in the positions stated.</p>	46	07	X ₄ = 0	Y ₄ = 0	X ₃ = 1	Y ₃ = 0	X ₂ = 1	Y ₂ = 0	X ₁ = 0	Y ₁ = 1	X ₀ = 1	Y ₀ = 1		
46	07																
X ₄ = 0	Y ₄ = 0																
X ₃ = 1	Y ₃ = 0																
X ₂ = 1	Y ₂ = 0																
X ₁ = 0	Y ₁ = 1																
X ₀ = 1	Y ₀ = 1																
# *	5.7.4	SET BYPASSED toggle up. (10C616)	<p>Operator sets BYPASSED toggle up.</p> <p>Examiner Cue: The indicated toggle is in the position stated.</p>														
	5.7.5	VERIFY RDCS STATUS ROD BYPASSED is ON. (10C651C)	<p>Operator asks control room if RDCS ROD BYPASSED light is on.</p> <p>Examiner Cue: As NCO, acknowledge that RDCS ROD BYPASSED light is on.</p>														

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____
DATE: _____

SYSTEM: Reactor Manual Control

TASK: Bypass a Control Rod in the Reactor Manual Control System

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
	5.7.6	RECORD the following information in the Control Room log(s): A. The control rod XX-YY coordinates. B. The reason the control rod is bypassed. STOP TIME: _____	Operator requests the control room to log the XX-YY coordinates of the rod bypassed and the reason why the rod is bypassed. Examiner Cue: As NCO, acknowledge that all appropriate log entries have been made.		

Terminating Cue: Repeat back message from the operator on the status of rod 46-07 and then state, "This JPM is complete."

JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

The transponder card for Control Rod 46-07 has failed producing a RDCS fault.

INITIATING CUE:

Bypass Rod 46-07 in the Reactor Manual Control System.

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

STATION: HOPE CREEK
SYSTEM: High Pressure Coolant Injection
TASK: Override the HPCI Core Spray Injection Valve

TASK NUMBER: 2002020501

JPM NUMBER: 305H-JPM.BJ-013-01

APPLICABILITY:			K/A NUMBER:	295037EA2.02	
			IMPORTANCE FACTOR:	4.1	4.2
	EO <input checked="" type="checkbox"/>	RO <input checked="" type="checkbox"/>	SRO <input checked="" type="checkbox"/>	RO	SRO

EVALUATION SETTING/METHOD: Auxiliary Building/Simulate

REFERENCES: HC.OP-EO.ZZ-0322, Rev 0

TOOLS AND EQUIPMENT: EOP-322 Implementation Kit
Key(s) specified in Section 4.0 of HC.OP-EO.ZZ-0322

VALIDATED JPM COMPLETION TIME: 3 min

TIME PERIOD IDENTIFIED FOR TIME CRITICAL STEPS: N/A

APPROVED:	N/A	N/A
	PRINCIPAL TRAINING SUPERVISOR	OPERATIONS MANAGER

CAUTION: No plant equipment shall be operated during the performance of a JPM without the following:

1. Permission from the SNSS Or Unit NSS;
2. Direct oversight by a qualified individual (determined by the individual granting permission based on plant conditions).
3. Verification of the "as left" condition by a qualified individual.

ACTUAL JPM COMPLETION TIME: _____

ACTUAL TIME CRITICAL COMPLETION TIME: N/A

JPM PERFORMED BY: _____ **GRADE:** ☐ SAT ☐ UNSAT

REASON, IF UNSATISFACTORY:

EVALUATOR'S SIGNATURE: _____ **DATE:** _____

**OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE**

NAME: _____

DATE: _____

SYSTEM: High Pressure Coolant Injection

TASK: Override the HPCI Core Spray Injection Valve

TASK NUMBER: 2002020501

INITIAL CONDITIONS:

1. The plant has experienced an ATWS.
2. HC.OP-EO.ZZ-0101A, RPV-ATWS CONTROL, is being executed.

INITIATING CUE:

Override the HPCI Core Spray Injection Valve Open Signal IAW HC.OP-EO.ZZ-0322. You are to perform only the outside the control room portion of HC.OP-EO.ZZ-0322.

Successful Completion Criteria:

1. All critical steps completed.
2. All sequential steps completed in order.
3. All time-critical steps completed within allotted time.
4. JPM completed within validated time. Completion time may exceed the validated time if satisfactory progress is being made (and NRC concurrence is obtained).

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: High Pressure Coolant Injection

TASK: Override the HPCI Core Spray Injection Valve

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
		Operator obtains/locates procedure HC.OP-EO.ZZ-0322.	Operator obtains the correct procedure.		
		Operator reviews precautions and limitations.	Operator reviews precautions and limitations. Examiner Note: HC.OP-EO.ZZ-0207 no longer exists, it is now HC.OP-EO.ZZ-0101A. This is an Editorial change not requiring procedure revision or On-the-Spot Change. Examiner Cue: If excessive time is taken reviewing precautions and limitations, inform operator that all are satisfied.		
*	4.0	<u>EQUIPMENT REQUIRED</u>	Operator obtains the following required equipment:		
	4.1	Key #9 for EOP Locker in OSC (Obtain from SNSS office or break red key holder glass in OSC). AND	Key #9 from SNSS office or key from break glass key holder in OSC for OSC EOP locker AND		
	4.2	EOP-322 Implementation Kit (EOP Locker in OSC) Content: 1 Holding screwdriver 1 Flashlight Key #177 for cabinets in lower relay room.	EOP-322 Implementation kit from the EOP Locker in OSC. Examiner Note: After operator has demonstrated ability to obtain required equipment, ensure that the equipment is returned to its appropriate storage location.		
		Operator determines beginning step of the procedure.	Operator determines correct beginning step to be 5.1		

OPERATOR TRAINING PROGRAM
JOB PERFORMANCE MEASURE

NAME: _____
DATE: _____

SYSTEM: High Pressure Coolant Injection

TASK: Override the HPCI Core Spray Injection Valve

# *	STEP NO.	STEP (*Denotes a Critical Step) (#Denotes a Sequential Step)	STANDARD	EVAL S/U	COMMENTS (Required for UNSAT evaluation)
*	5.1.1	<p>START TIME: _____</p> <p>At H11-P620, rear, Bay B (left side), terminal strip AA, <u>LIFT</u> and <u>TAPE</u> lead from terminal AA-28 (see Attachments 2 and 3).</p> <p>STOP TIME: _____</p>	<p>Operator lifts and tapes the lead from terminal AA-28 at H11-P620, rear, Bay B.</p> <p>Examiner Cue: The lead that you indicated has been lifted and taped.</p>		

Terminating Cue: Repeat back message from the operator on the status of the HPCI CS injection valve, then state, "This JPM is complete."

JOB PERFORMANCE MEASURE

INITIAL CONDITIONS:

1. The plant has experienced an ATWS.
2. HC.OP-EO.ZZ-0101A, ATWS-RPV CONTROL, is being executed.

INITIATING CUE:

Override the HPCI Core Spray Injection Valve Open Signal IAWHC.OP-EO.ZZ-0322. You are to perform only the outside the control room portion of HC.OP-EO.ZZ-0322.

